



Part 6 Local Area Plans

Division 2 Local Area Plans

Chapter 14 Guragunbah

1.0 Intent

The purpose of this Local Area Plan (LAP) is to provide detailed planning and management for the Merrimac/Carrara Floodplain, now known by its Aboriginal name, Guragunbah. This flood plain is of enormous importance to the City. Guragunbah provides the last significant largely undeveloped remnant of the Nerang River flood plain system. This LAP seeks to protect the hydraulic functions of the Guragunbah flood plain, while allowing limited residential, tourism and recreational development. There is also an opportunity to provide an extensive open space resource for the City which complements existing and future urban development.

This LAP is supported by three planning studies, namely the:

- a) Guragunbah (Merrimac/Carrara Floodplain) Hydraulic Master Plan;
- b) Report of the Merrimac/Carrara Floodplain Advisory Committee; and
- c) Merrimac/Carrara Floodplain Tourism Strategy.

This LAP is extensively based on the work undertaken as a part of the **Guragunbah (Merrimac/Carrara Floodplain) Structure Plan** adopted by Council on 30 March 1998.

These planning studies provide a background to the formulation of the LAP and technical information to support the policy directions adopted. In the case of the **Merrimac/Carrara Floodplain Tourism Strategy**, these include a range of possible land use options for the flood plain, and in the case of the **Guragunbah (Merrimac/Carrara Floodplain) Hydraulic Master Plan**, criteria for the hydraulic assessment of development proposals.

2.0 Application

- 2.1 This LAP applies to all development subject to the Planning Scheme and located within the LAP area as indicated in **Guragunbah LAP Map 14.1 – Boundary**.
- 2.2 The Table of Development indicated in **Clause 6.0** identifies the level of assessment for development occurring within this LAP area.
- 2.3 The codes that may be relevant to the assessment of development in this LAP area are listed in **Clause 7.0**.
- 2.4 It should be noted that self assessable development is consistent with the intent and Desired Environmental Outcomes (DEOs) of this LAP, and therefore need only comply with the acceptable solutions of the **Guragunbah LAP Place Code** contained in **Clause 8.0** and any other acceptable solutions identified in the relevant codes explicitly referred to in **Subclause 7.1**.
- 2.5 The LAP area incorporates the whole of the Merrimac/Carrara Floodplain, now known as Guragunbah. This area includes the whole of those allotments on or abutting the Merrimac/Carrara Floodplain which are considered to have potential for development and which are affected by the 1 in 100 Annual Recurrence Interval (ARI) flood, as defined in the **Guragunbah (Merrimac/Carrara Floodplain) Hydraulic Master Plan**. The LAP includes some areas, which are above the 1 in 100 ARI flood. These inclusions are considered necessary, since flood lines are not static (ie. they will change as the result of development and flood mitigation works) and, accordingly, cannot be utilised in isolation to define a specific area which is the subject of a particular planning instrument.



3.0 Desired Environmental Outcomes

- 3.1 The achievement of urban development that is of a scale, form and character appropriate to the immediate local area and the intended open character of the flood plain (refer to **DEO.Soc.1**).
- 3.2 The optimisation of opportunities for urban development, consistent with the environmental capacity of the land and the continuing functioning of the flood plain (refer to **DEO.Soc.7**).
- 3.3 The maintenance of existing significant views and enhancement of the visual quality and landscape character of the flood plain, with significant open space areas located so that they are visible from the Pacific Highway, Gold Coast City Railway and other major transport routes (refer to **DEO.Ecol.1**).
- 3.4 The rehabilitation of existing degraded water environments within the region to replicate natural ecosystems that are appropriate to flood plain areas, (refer to **DEO.Ecol.2**).

4.0 Local Area Features

The Guragunbah area is the largest 'urban' flood plain in Australia. It is almost completely surrounded by urban and suburban development. It is closely related to the extensive canal estates to the east, and is an essential hydraulic feature of the Gold Coast City's waterways. Its functions include its role as a water storage area during periods of flooding and as a location for major overland flow paths.

The Guragunbah area is partly developed with a range of land uses, notably tourism, residential, commercial, educational and recreational. It has relatively good accessibility to the major populated areas of the City. The Guragunbah area is traversed by a number of important transport routes, including a railway line, that provide linkages between some of the City's major activity centres, notably Robina, Nerang and Broadbeach.

Guragunbah has a distinctive open landscape character that is linked to its open space nature and the view lines that it affords both to the coastal strip and to the hinterland escarpment. The Guragunbah area, representing a significant 'breathing space' for the City, is a major contributor to the Gold Coast's City image.

The future use and development of the Guragunbah area will ensure that its primary hydraulic functions are protected and enhanced. Definition of the existing 1 in 100 ARI flood line will occur within the context of detailed site survey and the provisions of the **Guragunbah (Merrimac/Carrara Floodplain) Hydraulic Master Plan**. As such, particular regard will be given to development adjacent to flood prone land to ensure that an appropriate transition is achieved, and to ensure that public access to existing and possible future recreational opportunities in the flood plain is enhanced, visual compatibility is achieved, hydraulic and environmental linkages are facilitated and an acceptable standard of water quality is achieved.

It is envisaged that the Guragunbah area will ultimately comprise a limited mix of urban residential and tourist facilities, within a predominant environment of open space and ecologically sustainable waterways, which recognise the considerable recreation potential of the flood plain. In order to maximise the open character of the flood plain and minimise the cost of urban service provision and emergency response during flood events, urban development is expected to be clustered and, where possible, to represent a consolidation existing urban communities. As such, residential buildings may range from single dwelling houses to apartments, in an expansive landscaped environment, depending upon the opportunities presented by each site. Significant commercial or industrial development is not envisaged beyond limited local convenience or ancillary facilities and some expansion of the industrial areas on the western extremity of the flood plain.

Open space areas are likely to comprise a mix of public and private facilities for both recreational pursuits and nature conservation. The planning study **Merrimac/Carrara Floodplain Tourism Strategy** suggests a number of suitable development options. Where waterbodies are proposed as part of development, it is intended that they be viable freshwater environments, except where a brackish system can be achieved in proximity to the Nerang River without the imposition of ongoing cost to the broader community.

In all cases, development must be designed to ensure no adverse flooding impacts, having regard to the cumulative effect of all likely development within the flood plain. In addition, development will need to ensure that the level of risk to occupants is acceptable during flood events and that appropriate emergency response can be facilitated. These issues are addressed more fully in the **Guragunbah (Merrimac/Carrara Floodplain) Hydraulic Master Plan**.



5.0 Planning Measures

While the Guragunbah LAP area is large and complex in terms of land use, it is not divided into formal planning precincts for development control purposes. Instead, the entire LAP area is treated as a single land unit. This format has been adopted as a direct response to the major constraints on the future development of the Guragunbah Floodplain, and reflects the unique physical environment of the flood plain. It has proved not to be practical to denote precise boundaries to areas suitable for development, because of the role of the flood plain as a major flood storage area and the potential to alter or shift flood flows as part of an overall development scheme. The adopted format therefore provides considerable flexibility for creative design and land use solutions within the identified framework, whilst having due regard to the reasonable expectations of other landowners.

This LAP seeks to provide for a mix of land uses, including urban residential, tourism facilities and limited local commercial uses, within an environment of predominately open space and waterbodies. Urban development is expected to be clustered, to maximise the opportunities to provide open space areas. The LAP provides for more intensive development, where this is appropriate in the context of the future strategic development of the City, to support the key regional centre at Robina and the major new public transport interchanges at Nerang and Robina Railway Stations. **Guragunbah LAP Map 14.7 – Conceptual Land Use** illustrates one future vision of the flood plain.

The provisions also seek to ensure that any built development is designed to be compatible with existing neighbouring uses, particularly existing residential dwellings, and to provide an adequate residential living environment for future residents.

6.0 Guragunbah Local Area Plan Table of Development

Note: *This table must be read in conjunction with the explanation provided in Part 6, Division 1, Chapter 2 – Using Local Area Plans.*

A: Material Change of Use

Exempt	Self Assessable	Code Assessable	Impact Assessable
Total Local Area Plan Area			
Conservation (natural area management) Family Day Care Home Home Office Low-Impact Telecommunications Facility Minor Change in the scale or intensity of an existing lawful use Open Sports Ground Park Public Utility Special Accommodation	Home Occupation Temporary Use	Animal Husbandry Bed and Breakfast Car Park Caretaker's Residence Detached Dwelling Family Accommodation Farm Forestry Minor Tourist Facility Telecommunications Facility n.e.i.	Apartment Attached Dwellings and Medium Density Detached Dwellings Cafe Child Care Centre Community Care Centre Convenience Shop Educational Establishment Hostel Accommodation Indoor Recreation Facility Industry Kennel Market Motel Nightclub Office Outdoor Sport and Recreation Place of Worship Reception Room Resort Hotel Restaurant Retail Nursery Service Industry Shop Tavern Veterinary Clinic



B: Material Change of Use Overlay Provisions

Exempt	Self Assessable	Code Assessable	Impact Assessable
Material Change of Use involving Building Work that:			
		exceeds two storeys due to the inclusion of a partial third storey, and the GFA of the partial storey does not exceed 50% of the GFA of the storey immediately below	exceeds four storeys in height
			exceeds two dwellings per lot
	is on a site located in a Medium or High Potential Bushfire Hazard Area, as on Overlay Map OM10 – Potential Bushfire Hazard Areas , and complies with the Acceptable Solutions of Constraint Code 2 – Bushfire Management Areas	is on a site located in a Medium or High Potential Bushfire Hazard Area, as identified on Overlay Map OM10 – Potential Bushfire Hazard Areas , and alternative solutions to the Acceptable Solutions of Constraint Code 2 – Bushfire Management Areas are proposed	
	is on a site identified on Overlay Map OM13 – Building Setback Line from Canals and Waterways as being affected by a waterway building setback, and is in compliance with the Acceptable Solutions of Constraint Code 3 – Canals and Waterways	is on a site identified on Overlay Map OM13 – Building Setback Line from Canals and Waterways as being affected by a waterway building setback, and alternative solutions to the Acceptable Solutions of Constraint Code 3 – Canals and Waterways are proposed	
		is on or adjoins a site listed on the Queensland Heritage Register (Queensland Heritage Act 1992) or the Register of the National Estate (Australian Heritage Commission Act 1975) or the National Trust of Queensland list	
		is within or adjoins an allotment containing places, sites, or landscapes of indigenous cultural heritage significance listed on the Queensland Heritage Register – Cultural Records (Landscapes Queensland and Queensland Estate) Act 1987 ; OR	



Exempt	Self Assessable	Code Assessable	Impact Assessable
		<p>is located on land which is the subject of a native title claim;</p> <p>OR</p> <p>is located on land that is known to the owner and/or the developer to be of indigenous cultural heritage value</p>	
			<p>would result in a residential dwelling being located within 500 metres of a lot containing an extractive industry operation or resource (hard rock quarrying) or within 200 metres of a lot containing an extractive industry operation or resource (sand and gravel operations), as defined on Overlay Map OM23 – Extractive Resources</p>
	<p>is on a site identified on the Domain Maps as being affected by Future Road Requirement and complies with the Acceptable Solutions of Constraint Code 4 – Car Parking, Access and Transport Integration</p>	<p>is on a site identified on the Domain Maps as being affected by Future Road Requirement and alternative solutions to the Acceptable Solutions of Constraint Code 4 – Car Parking, Access and Transport Integration are proposed</p>	
	<p>is on land with frontage to the Pacific Motorway road reserve or a Pacific Motorway service road as indicated on Overlay Map OM15 – Pacific Motorway Service Road Types and complies with the Acceptable Solutions of Constraint Code 15 – Service Roads (Pacific Motorway)</p>	<p>is on land with frontage to the Pacific Motorway road reserve or a Pacific Motorway service road as indicated on Overlay Map OM15 – Pacific Motorway Service Road Types and alternative solutions to the Acceptable Solutions of Constraint Code 15 – Service Roads (Pacific Motorway) are proposed</p>	

C: Operational Work – Changes to Ground Level

Exempt	Self Assessable	Code Assessable	Impact Assessable
Operational Work that involves extraction, excavation or fill that:			
		<p>exceeds a volume of 20 cubic metres of fill or excavation or is closer than two metres from the allotment boundary</p>	



Exempt	Self Assessable	Code Assessable	Impact Assessable
		<p>is within or adjoins an allotment containing places, sites, or landscapes of indigenous cultural heritage significance listed on the Queensland Heritage Register – Cultural Records (Landscapes Queensland and Queensland Estate) Act 1987;</p> <p>OR</p> <p>is located on land which is the subject of a native title claim;</p> <p>OR</p> <p>is located on land that is known to the owner and/or the developer to be of indigenous cultural heritage value</p>	

D: Operational Work – Advertising Device

Exempt	Self Assessable	Code Assessable	Impact Assessable
	<p>Advertising Device that is:</p> <p>a) not illuminated, nor animated, and where the total area of signage per street frontage does not exceed 5m²;</p> <p>b) not visible from any State-controlled road</p>	<p>Advertising Devices n.e.i.</p>	

E: Operational Work – Infrastructure and Landscape Work

Exempt	Self Assessable	Code Assessable	Impact Assessable
<p>Minor Landscape Work</p>		<p>Landscape Work n.e.i.</p>	
<p>Landscape Work associated with a Detached Dwelling or a Caretaker's Residence</p>		<p>Works for Infrastructure</p>	



F: Operational Work – Vegetation Clearing

Exempt	Self Assessable	Code Assessable	Impact Assessable
Vegetation Clearing that:			
	<p>results in the removal of, or damage to, vegetation that is equal to, or in excess of, 40 centimetres in girth (circumference) measured at 1.3 metres above average ground level, and complies with the Acceptable Solutions of Specific Development Code 36 – Vegetation Management;</p> <p>OR</p> <p>results in the removal of, or damage to, vegetation that is equal to, or in excess of, four metres in height and complies with the Acceptable Solutions of Specific Development Code 36 – Vegetation Management</p>	<p>results in the removal of, or damage to, vegetation that is equal to, or in excess of, 40 centimetres in girth (circumference) measured at 1.3 metres above average ground level, and alternate solutions to the Acceptable Solutions of Specific Development Code 36 – Vegetation Management are proposed;</p> <p>OR</p> <p>results in the removal of, or damage to, vegetation that is equal to, or in excess of, four metres in height and alternate solutions to the Acceptable Solutions of Specific Development Code 36 – Vegetation Management are proposed</p>	<p>results in the removal of, or damage to, vegetation over which a Vegetation Protection Order has been made by Council</p>

G: Reconfiguring a Lot

Exempt	Self Assessable	Code Assessable	Impact Assessable
Reconfiguring a Lot that:			
		<p>results in no lots with an area less than four hectares;</p> <p>OR</p> <p>entails only a Community Title Subdivision (including Standard Format Plans and/or Volumetric Lots), or a Volumetric Lot within a building, or a leasehold subdivision of an existing or approved development</p>	<p>results in one or more lots with an area less than four hectares</p>
			<p>would create the potential for a residential dwelling to be located within 500 metres of a lot containing an extractive industry operation or resource (hard rock quarrying) or within 200 metres of a lot containing an extractive industry operation or resource (sand and gravel operations), as defined on Overlay Map OM23 – Extractive Resources</p>



7.0 Relevant Codes

Codes relevant for development assessment in the Guragunbah LAP are listed below. The Place Code applies in all cases. A Specific Development Code will only apply if that specific development is proposed. A Constraint Code will only apply where the proposed development is directly impacted by the constraint that is the subject of that code.

7.1 Self Assessable Development

The following codes apply to development that is self assessable in the Guragunbah LAP area.

Place Code	Specific Development Codes	Constraint Codes
Guragunbah LAP Place Code	2 Advertising Devices 34 Temporary Use 36 Vegetation Management 38 Working From Home	2 Bushfire Management Areas 3 Canals and Waterways 4 Car Parking, Access and Transport Integration 8 Flood Affected Areas 10 Nature Conservation 15 Service Roads (Pacific Motorway)

7.2 Material Change of Use

The following codes apply to development that is code or impact assessable **Material Change of Use** in the Guragunbah LAP area.

Place Code	Specific Development Codes	Constraint Codes
Guragunbah LAP Place Code	4 Animal Husbandry 6 Attached Dwellings and Medium Density Detached Dwellings 7 Bed and Breakfast Tourist Accommodation 10 Caretaker's Residence 12 Child Care Centres 13 Detached Dwellings 14 Display Homes and Estate Sales Offices 16 Family Accommodation 17 Farm Forestry 19 High Rise Residential and Tourist Accommodation 20 Kennels 21 Landscape work 22 Low Rise Apartment Building 23 Low Rise Commercial Tourist Accommodation 24 Office 25 Private Recreation 27 Retail and Related Establishments 33 Telecommunications Facilities 38 Working From Home 39 Works for Infrastructure	1 Gold Coast Airport and Aviation Facilities 2 Bushfire Management Areas 3 Canals and Waterways 4 Car Parking, Access and Transport Integration 5 Cultural Heritage (Historic) 6 Cultural Heritage (Indigenous) 8 Flood Affected Areas 9 Natural Wetland Areas and Natural Waterways 10 Nature Conservation 12 Rail Corridor Environs 13 Road Traffic Noise Management 14 Sediment and Erosion Control 15 Service Roads (Pacific Motorway) 17 Unsewered Land



7.3 Operational Work – Changes to Ground Level

The following codes apply to development that is code assessable **Operational Work – Changes to Ground Level** (extracting gravel, rock, sand or soil from the place where it occurs naturally, or excavating or filling that materially affects premises or their use) in the Guragunbah LAP area.

Place Code	Specific Development Codes	Constraint Codes
Guragunbah LAP Place Code	11 Changes to Ground Level and Creation of New Waterbodies	2 Bushfire Management Areas 3 Canals and Waterways 4 Car Parking, Access and Transport Integration 6 Cultural Heritage (Indigenous) 8 Flood Affected Areas 9 Natural Wetland Areas and Natural Waterways 10 Nature Conservation 14 Sediment and Erosion Control 15 Service Roads (Pacific Motorway)

7.4 Operational Work – Advertising Devices, Landscape Work and Infrastructure

The following codes apply to development that is code assessable **Operational Work – Advertising Devices** (placing an Advertising Device on premises), **Landscape Work** (undertaking Landscape Work in, on, over or under premises that materially affects premises or their use) or **Infrastructure** (undertaking Works for Infrastructure) in the Guragunbah LAP area.

Place Code	Specific Development Codes	Constraint Codes
Guragunbah LAP Place Code	2 Advertising Devices 21 Landscape Work 39 Works for Infrastructure	2 Bushfire Management Areas 3 Canals and Waterways 5 Cultural Heritage (Historic) 6 Cultural Heritage (Indigenous) 9 Natural Wetland Areas and Natural Waterways 10 Nature Conservation 14 Sediment and Erosion Control 15 Service Roads (Pacific Motorway)

7.5 Operational Work – Vegetation Clearing

The following codes apply to development that is code assessable **Operational Work – Vegetation Clearing** in the Guragunbah LAP area.

Place Code	Specific Development Codes	Constraint Codes
Guragunbah LAP Place Code	36 Vegetation Management	2 Bushfire Management Areas 5 Cultural Heritage (Historic) 6 Cultural Heritage (Indigenous) 9 Natural Wetland Areas and Natural Waterways 10 Nature Conservation 14 Sediment and Erosion Control 15 Service Roads (Pacific Motorway)



7.6 Reconfiguring a Lot

The following codes apply to development that is code or impact assessable **Reconfiguring a Lot** in the Guragunbah LAP area.

Place Code	Specific Development Codes	Constraint Codes
Guragunbah LAP Place Code	11 Changes to Ground Level and Creation of New Waterbodies 21 Landscape Work 28 Reconfiguring a Lot 36 Vegetation Management 39 Works for Infrastructure	2 Bushfire Management Areas 3 Canals and Waterways 4 Car Parking, Access and Transport Integration 5 Cultural Heritage (Historic) 6 Cultural Heritage (Indigenous) 7 Flood Affected Areas 8 Natural Wetland Areas and Natural Waterways 10 Nature Conservation 12 Rail Corridor Environs 13 Road Traffic Noise Management 14 Sediment and Erosion Control 15 Service Roads (Pacific Motorway) 17 Unsewered Land

8.0 Guragunbah LAP Place Code

8.1 Purpose

This Place Code seeks to maintain and enhance the open landscape character, natural features and the low population density settlement pattern of the Guragunbah LAP area. The code seeks to:

- maintain and enhance the recognised flood plain landscape quality;
- maintain important habitat areas and wildlife corridors within the area; and
- ensure tourist and residential activity takes place at low densities.

This Place Code also seeks to ensure that the scale and density of development and, in particular, the impact of all development on the hydraulic performance of the flood plain is consistent with the intent of this section and the DEOs of this LAP.

8.2 Application

8.2.1 The Guragunbah LAP Place Code applies to development indicated as self, code or impact assessable in the Guragunbah LAP Table of Development at **Clause 6.0** of this LAP.

8.2.2 Performance Criteria PC1-PC45 apply to all code and impact assessable development in this LAP. For development identified as self assessable in **Clause 6.0**, only the Acceptable Solutions to Performance Criteria PC1-PC5 apply.

8.3 Development Requirements

Performance Criteria	Acceptable Solutions
Development that is Self Assessable, Code Assessable or Impact Assessable	
Building Height	
PC1 All buildings must be of a height which is in keeping with the predominantly open space character of the surrounding area. Building height must not result in a significant loss of visual amenity.	AS1 The building has a maximum height not exceeding two storeys.



Performance Criteria	Acceptable Solutions
Accommodation Density	
<p>PC2</p> <p>The gross accommodation density must be low, to maintain and enhance the quality of the flood plain landscape and nature conservation values. However, in areas where large expanses of open space are securely managed, net densities may be greater, consistent with the land use pattern indicated on Guragunbah LAP Map 14.7 – Conceptual Land Use.</p>	<p>AS2.1.1</p> <p>The dwelling density is one detached dwelling per lot.</p> <p>OR</p> <p>AS2.1.2</p> <p>The gross dwelling density for any site does not exceed seven dwellings per hectare.</p>
Site Coverage	
<p>PC3</p> <p>The site coverage of development must be consistent with the low density tourism, recreation and nature conservation character of the surrounding area.</p>	<p>AS3.1.1</p> <p>The site coverage of all buildings does not exceed 10% of the total site area.</p> <p>OR</p> <p>AS3.1.2</p> <p>The development is for a detached dwelling, located within a lot that has been created by a residential subdivision approval (ie. the lot is intended to be serviced by sewerage reticulation) and the development complies with the conditions of the subdivision approval and any subsequent operational works approval. Except where the earlier approval specifies otherwise, the site coverage does not exceed 50%.</p>
Building Setback	
<p>PC4</p> <p>All buildings must provide for setbacks from the street frontage and the side and rear boundaries of the site which are appropriate for:</p> <ol style="list-style-type: none"> the efficient use of the site; the rural character of the area; the separation from neighbouring properties and from frontages to roads. 	<p>AS4.1.1</p> <p>The building is set back not less than ten metres from the frontage and at least three metres from any other boundary.</p> <p>OR</p> <p>AS4.1.2</p> <p>The development is for a detached dwelling, located within a lot that has been created by a residential subdivision approval (ie. the lot is intended to be serviced by sewerage reticulation) and the development complies with the conditions of the subdivision approval and any subsequent operational works approval. Except where the earlier approval specifies otherwise, the frontage setback is not less than 6 metres and all other setbacks are not less than 1.5m.</p>
Vehicular Crossings	
<p>PC5</p> <p>Vehicular crossings associated with the development must be designed and constructed to ensure:</p> <ol style="list-style-type: none"> a safe footpath environment; safe vehicular access to the property; appropriate hydraulic performance of the stormwater infrastructure; no damage to vehicle or road infrastructure; minimal loss of on-street parking spaces; continued amenity of the neighbourhood. 	<p>AS5</p> <p>Driveways are designed and constructed in accordance with relevant sections of Planning Scheme Policy 11 – Land Development Guidelines.</p>



Performance Criteria	Acceptable Solutions
Development that is Code Assessable or Impact Assessable	
Building Height	
<p>PC6</p> <p>All buildings must be of a height which is in keeping with the predominately open space character of the surrounding area. Building height must not result in a significant loss of visual amenity.</p>	<p>AS6.1.1</p> <p>The building does not exceed four storeys.</p> <p>OR</p> <p>AS6.1.2</p> <p>The building exceeds four storeys, and has:</p> <ol style="list-style-type: none"> a) direct access to a major public transport system or is located in the immediate vicinity of a railway station or Robina Town Centre. b) has a minimum total site area of 10 hectares and the majority of the site forms a landscaped setting for the building. c) has a minimum area of less 10 hectares, but forms part of an integrated development of at least 10 hectares, and the majority of the site form a landscaped setting for the building.
Accommodation Density	
<p>PC7</p> <p>The gross accommodation density must be low, to maintain and enhance the quality of the flood plain landscape and nature conservation values. However, in areas where large expanses of open space are securely managed, net densities may be greater, consistent with the land use pattern indicated on Guragunbah LAP Map 14.7 – Conceptual Land Use.</p>	<p>AS7.1.1</p> <p>The gross site density does not exceed 16 dwellings per hectare where the site is less than 1 hectare but forms part of an integrated project comprising a total site area of greater than 1 hectare, and the resulting land use pattern is consistent with the intent of the LAP.</p> <p>OR</p> <p>AS7.1.2</p> <p>The gross site density does not exceed 25 dwelling units per hectare where the site is greater than 1 hectare and does not have direct access off a major public transport system, nor is it located in the immediate vicinity of a railway station or Robina Town Centre, and the resulting land use pattern is consistent with the intent of this LAP.</p> <p>OR</p> <p>AS7.1.3</p> <p>The gross site density does not exceed 75 dwelling units per hectare where the site is greater than 1 hectare and has direct access off a major public transport system or is located in the immediate vicinity of a railway station or Robina Town Centre and the resulting land use pattern is consistent with the intent of this LAP.</p>
Siting	
<p>PC8</p> <p>All buildings must be sited to complement the natural landscapes and topographical features of the site and the surrounding flood plain/open space area, having regard to:</p> <ol style="list-style-type: none"> a) significant views and vistas; b) natural water systems; c) remnant vegetation; d) a site analysis, prepared in accordance with Planning Scheme Policy 17 – Site Analysis. 	<p>AS8</p> <p>No acceptable solution provided.</p>



Performance Criteria	Acceptable Solutions
Visual Appearance of Buildings	
<p>PC9 All buildings must be designed so that their scale and relative visual prominence do not dominate the Guragunbah landscape.</p>	<p>AS9.1 Buildings are sited to avoid disruption to any significant view from a public place within the LAP area, and to ensure that they do not impact upon the natural character of views of the LAP area from the outside.</p> <p>AS9.2 The location of any building is determined on the basis of a visual impact assessment submitted by the applicant and by the need to retain any significant trees on the site.</p>
<p>PC10 The architectural style of new buildings must complement the character and environment of the Guragunbah area and its landscapes.</p>	<p>AS10 No acceptable solution provided.</p>
Advertising Devices	
<p>PC11 All signage erected for identification and advertising purposes must be low key in style and complementary to the semi-rural and natural character of the Guragunbah landscape.</p>	<p>AS11.1 Advertising devices do not extend above the ground greater than 1.5 metres, do not have a horizontal dimension greater than two metres, and do not have a surface area exceeding 1.5m².</p> <p>AS11.2 The typeface on the sign is not taller than 30cm.</p> <p>AS11.3 Internally illuminated or animated advertising devices are not used.</p> <p>AS11.4 All signs are consistent with the provisions for the Private Open Space Domain set out in Specific Development Code 2 – Advertising Devices.</p>
Landscape Work	
<p>PC12 The nature conservation values of the Guragunbah area must be enhanced by landscape work and revegetation initiatives. All landscape work shall be designed and sited to maintain a predominantly natural, open space character.</p>	<p>AS12.1 Local native vegetation species are used in landscape work and revegetation initiatives.</p> <p>AS12.2 Except for the purposes of constructing a dwelling or other building, vegetation is not removed from allotments.</p>
<p>PC13 Development must contribute to the provisions of a system of Open Space Corridors throughout the LAP area, as shown on Guragunbah LAP Map 14.3 – Open Space, to form a network across the flood plain and link into adjoining areas. Open Space Corridors must be provided to ensure continuous ecological links between open space and environmental areas. Open Space Corridors must be provided to fulfil a variety of other functions, including:</p> <ol style="list-style-type: none"> providing wildlife corridors for birds, small mammals, reptiles, fish and invertebrates along waterways and vegetated strips; preserving existing native vegetation and providing revegetation; improving the long term viability of existing isolated stands of vegetation; 	<p>AS13.1 Open Space Corridors are provided, as shown conceptually on Guragunbah LAP Map 14.3 – Open Space, and are:</p> <ol style="list-style-type: none"> a minimum of 100 metres wide, with the appropriate width depending upon the types of species moving between habitats, their significance, and whether a walkway/bikeway is to be provided; in the case of Open Space Corridors, as shown on the Guragunbah LAP Map 14.3 – Open Space as running along watercourses, a minimum of 50 metres wide from the top of each bank; where watercourses are to be reshaped or relocated, a minimum of 50 metres wide from the top of each bank of the altered watercourse;



Performance Criteria	Acceptable Solutions
<p>d) providing public access opportunities for walking, cycling, horse riding, canoeing or other compatible uses, where indicated on Guragunbah LAP Map 14.6 – Transport Links;</p> <p>e) providing visual green buffers and backdrops to any future development.</p> <p>As most of the Open Space Corridors shown on Guragunbah LAP Map 14.3 – Open Space currently have little or no significant native vegetation within them, it is intended that these corridors, excluding watercourses, be substantially planted to form vegetated corridors.</p>	<p>c) linkages between identified High Conservation Significance Areas, Moderate Conservation Significance Areas and existing public open space areas, wherever possible providing for the retention of existing native vegetation;</p> <p>d) including provision for a pedestrian and bike path, where indicated on Guragunbah LAP Map 14.6 – Transport Links, and where compatible with the long term ecological sustainability of the corridor;</p> <p>e) designed and maintained to meet the hydraulic requirements of the Guragunbah (Merrimac /Carrara Floodplain) Hydraulic Master Plan;</p> <p>f) located to provide a continuous corridor linking existing or proposed corridors in adjoining properties.</p> <p>AS13.2 Enhancement of the natural qualities of the identified corridors may include planting of appropriate species, removal of weeds and inappropriate species, or fencing of the area.</p>
<p>PC14</p> <p>View sheds identified and described on Guragunbah LAP Map 14.3 – Open Space must be preserved and maintained. These represent existing public views from transport corridors, such as roads and the rail line and public open space. The key components that make up their designation include the:</p> <p>a) length of the view;</p> <p>b) existence of similar viewpoints;</p> <p>c) scale and three dimensional form of the landscape;</p> <p>d) areas of vegetation within the view;</p> <p>e) open character and naturalness of the view;</p> <p>f) major landmarks within the view;</p> <p>g) contribution to the character of established surrounding communities.</p> <p>Development must maintain the overall open character and visual quality of the flood plain, and support its role in providing 'breathing space' for the built up areas of the City.</p>	<p>AS14.1</p> <p>All development is designed to retain the identified view sheds and, in all cases, to maintain the overall open character of the flood plain. To achieve this, development:</p> <p>a) provides for appropriate land uses to maximise the overall open character;</p> <p>b) ensures an appropriate siting, scale density and intensity of buildings and structures to maximise the overall open character and sense of naturalness;</p> <p>c) ensures that any planting or landscape treatment complements long views across the flood plain or views into the flood plain;</p> <p>d) provides appropriate building materials and colours to reinforce the natural character of the flood plain landscape;</p> <p>e) provides vegetated open space areas alongside major transport corridors.</p>

Design Guideline – View Sheds

In areas where open view sheds and visual access to 'green' areas is desired, land uses (such as those detailed below) can achieve not only a functional but a visually appropriate solution.

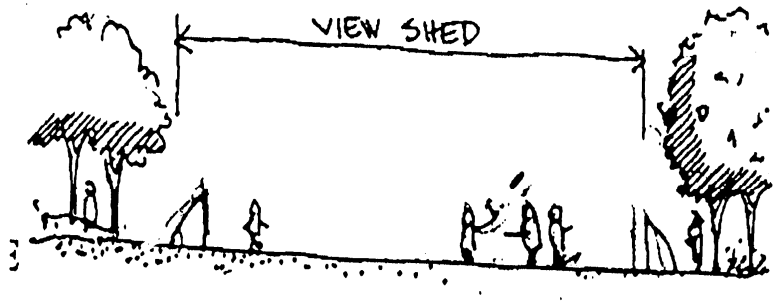
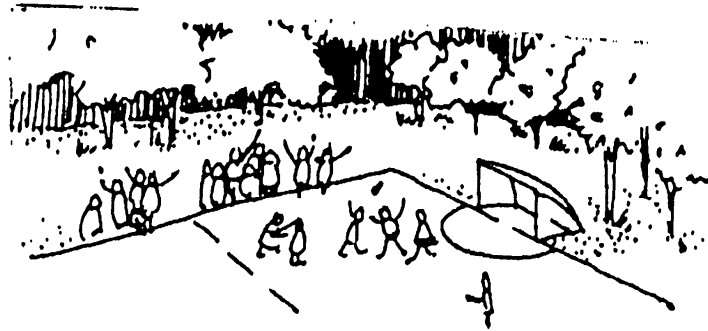
Dry Detention Basins can be integrated into site design with sensitive use of planting, such as native grasslands and embankment planting, to provide visual amenity, shade and shelter. The shape of detention basins should reflect natural forms and suit their particular primary function.

Wetland Areas including the use of permanently inundated and periodically wet areas, can achieve an open character, with multiple usage as a drainage area, passive recreational areas and wildlife refuge.

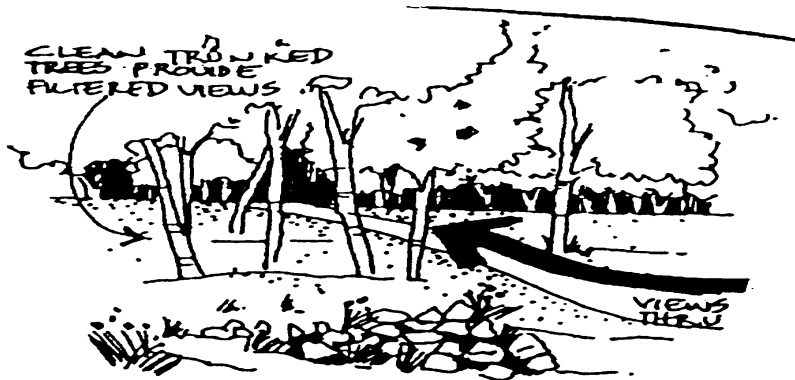


Performance Criteria	Acceptable Solutions
----------------------	----------------------

Formalised Sporting and Recreational Open Space Areas



General Vegetated Areas and Passive Recreational Areas



Design Guideline – Open Space Character

To maximise open space character, development can be designed to consider the following:

Built form can be consolidated – large development areas can be broken up into small components by waterways and open space to avoid large built surface areas and bulk massing.

Design Guideline – Open Space Corridors

The use of screening vegetation and vegetation to filter views can soften the visual impact of built development.

In selecting the colours and materials, the impact on views and the landscape setting should be considered. The use of recessive, non-reflective and complementary colours on roofs and structures to reduce visual impact is recommended.

Sensitive variation of building heights can frame and filter views, in conjunction with open space areas that can be located in significant view sheds.



Performance Criteria	Acceptable Solutions

Locate open space uses in view corridors and utilise existing vegetation to preserve the impression of naturalness. Locate built structures below the ridgeline and vegetated skyline.

Design Guideline – Feature Views

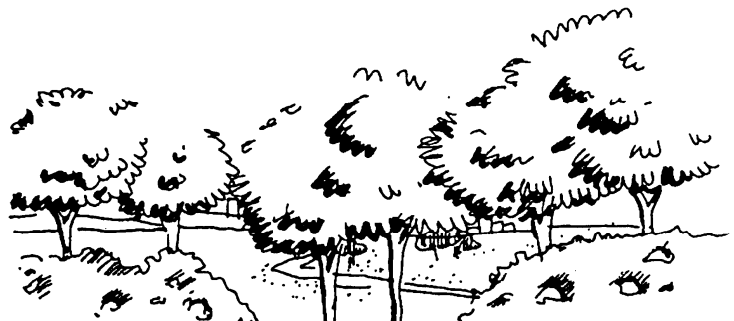
Landscape treatment can feature significant views or vistas. This can open up and enhance views. An addition of an upper canopy can filter or frame views, for example:

Unrestricted or Open Views promote views across the flood plain by using low level native shrubbery or grasslands at the view source that support or reflect the surrounding land uses and enhance views.



Filtered Views

landscape treatment can filter negative images or activities and provide glimpses of valued elements or increase the awareness of the viewer. This is an extension of the unrestricted/open view, with an additional higher layer of vegetation.





Performance Criteria	Acceptable Solutions
----------------------	----------------------

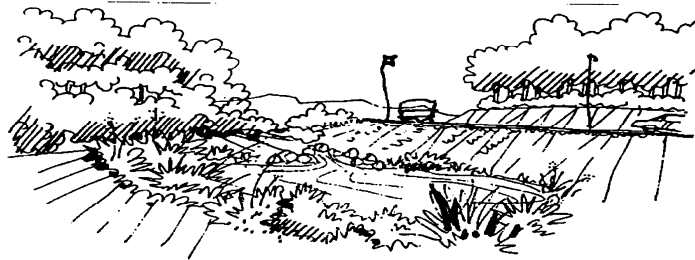
Framed Views

opening the landscape to a framed view, by utilising a gap in the vegetation at the view source, provides a direct view of an element of interest. If the desired framed view is along a transport corridor, the speed of passing vehicles and the angle at which the particular element is to be viewed should be considered.



Design Guideline – Water Features

Water features often used in construction (such as retention basins and sedimentation basins) can be sited alongside the road and combined with sensitive use of planting and hard landscape elements.



Open space buffer areas can be utilised to provide increased visual amenity to a residential development adjacent to transport corridors, whilst respecting identified views, and promoting the creation of visually distinctive urban communities.



PC15

Private Open Space Areas such as golf courses and other major private open space areas must be developed in such a way to make a significant and positive contribution to the retention and enhancement of the natural environment on the flood plain, and to provide for public access through such developments, where appropriate.

AS15

Private open space developments within the flood plain provide the following:

- a) predominant use of local native vegetation species;
- b) where waterbodies are to be created, preference is given to the creation of wetland habitats;
- c) retention of existing natural watercourses and associated areas of native vegetation;
- d) creation of ecological corridors, through continuous areas of vegetation planting linking through the site;
- e) provision for a public pedestrian and bike path, through or along the edge of the site, as indicated on **Guragunbah LAP Map 14.6 – Transport Links**;
- f) provision of wildlife habitat islands/refuges in created waterbodies;
- g) recycling of run off and irrigation water;
- h) use of treated effluent for irrigation purposes.



Performance Criteria	Acceptable Solutions
<p>PC16 Public Open Space Areas within the flood plain must be provided to meet the recreational needs of the existing residents and the surrounding communities, as well as the needs of the wider Gold Coast City community. These may include areas for major event facilities, district level sports facilities, passive recreation areas and a network of local parks.</p>	<p>AS16 Land to be dedicated to Council as part of the open space development contribution, to form a neighbourhood reserve, meets the following criteria:</p> <ol style="list-style-type: none"> a) a size appropriate to its function; b) a suitable elevation and sufficient drainage to minimise the number of days that the open space is unusable through inundation; c) not on contaminated land; d) provides links between other areas of public open space, where possible; e) easily accessible by pedestrians and cyclists; f) sited to maximise the percentage of the perimeter of the park that has direct road frontage; g) a maximum gradient of 1:10 for 80% of the area.
<p>PC17 Landscaping proposals for new development must clearly contribute to the protection and enhancement of the existing dominant visual features of the area.</p>	<p>AS17 Roadside vegetation is maintained and enhanced by landscape works. The clearing of roadside vegetation (apart from provision of safe driveway access) is avoided in any development.</p>
<p>Flooding Provisions</p>	
<p>PC18 Development must be designed to ensure that residents, occupants or users are not at unreasonable risk from flooding.</p>	<p>AS18.1 Any modifications to the flood plain resulting from the development do not:</p> <ol style="list-style-type: none"> a) increase (and preferably reduce), any reasonable expectation of: <ul style="list-style-type: none"> ▪ flood risk; ▪ flood damage; ▪ flood hazard to existing properties; b) place occupants or users at undue risk of flood damage or hazard; c) adversely affect flooding to reduce the potential risk of other landowners within the flood plain; d) impose any additional burden on, and if possible improve, the City's counter-disaster response during a flood emergency. <p>AS18.2 Road crown surface levels meet the following minimum standards:</p> <ol style="list-style-type: none"> a) any road that provides the sole means of exit from a residential area to a place of refuge is constructed to provide immunity from 5% annual exceedance probability floods; b) road crown levels of residential streets, including private driveways greater than 15 metres in length and serving three or more dwellings, are constructed not less than 300mm below the 1% annual exceedance probability flood level.



Performance Criteria	Acceptable Solutions
	<p>AS18.3</p> <p>Development is designed to meet the following criteria, unless part of a Council approved flood mitigation strategy:</p> <ul style="list-style-type: none"> a) no adverse effects, external to the subject land, arising from any increase in velocity and/or redirection of flood flow; b) no increase in the duration of inundation outside the site, where such increased inundation could cause loss or damage; c) development shall not: <ul style="list-style-type: none"> ▪ plan (flooding); ▪ increase the number of people calculated to be at risk from flooding; ▪ increase the number of people likely to need evacuation; ▪ shorten flood warning times; ▪ impact on the ability of traffic to use evacuation routes or unreasonably increase traffic volumes on evacuation routes, as designated within Council's Counter Disaster Plan (flooding).
<p>PC19</p> <p>All development proposals must be assessed for their hydraulic impacts. Guragunbah LAP Map 14.2 – Floodways indicates peak flood levels, core floodways, peripheral floodways and flood fringe areas. The floodways and flood fringe areas (further defined in the Guragunbah (Merrimac/Carrara Floodplain) Hydraulic Master Plan) indicate the approximate extent of flooding during the design flood event, within the LAP area and flow paths, where hydraulic continuity needs to be maintained.</p> <p>The LAP seeks to allow for appropriate earthworks in the flood plain, using compensated filling techniques to create platforms with sufficient flood immunity for development or other changes in topography for development such as recreational facilities. The impact of any significant changes to the flood plain are not to be considered in isolation, and account is to be taken of cumulative effects on flood levels, across the flood plain itself and the wider river system.</p>	<p>AS19.1</p> <p>Peak flood levels outside the site for the area covered by the Department of Natural Resources and Mines computer model of the flood plain, including its southern extension, are not increased and are preferably reduced for a range of floods, including:</p> <ul style="list-style-type: none"> a) the 50% to 1% annual exceedance probability for local flood events; and b) the 5% to 1% annual exceedance probability for regional flood events. <p>Flood storage within the site is maintained or, where possible, increased for a range of floods, including:</p> <ul style="list-style-type: none"> a) 20% to 1% annual exceedance probability for local flood events; b) 5% to 1% annual exceedance probability for regional flood events. <p>Flow hydrographs at nominated hydraulic sections and control points upstream and downstream of the proposed development remain essentially unchanged, provided that, where Council approves a developer flood mitigation scheme arrangement, which demonstrates an overall reduction of peak flood levels.</p> <p>Note: <i>AS19.1 may be varied, having regard to the costs and benefits of the scheme, the methods of funding and any other relevant matter. In exercising its discretion in this regard, Council will ensure that a demonstrated majority of the expected reduction of peak flood levels is maintained in perpetuity, for the benefit of all flood affected residents within the Nerang River catchment.</i></p>



Performance Criteria	Acceptable Solutions
	<p>AS19.2</p> <p>Approval of any filling work, below the designated flood level will only be given where these are compensated by an equivalent volume of cut, also below the designated flood level, and where the areas of cut and fill are clearly linked in perpetuity to Council's satisfaction, unless a developer flood mitigation scheme arrangement, containing the following features, is approved:</p> <ol style="list-style-type: none"> when approving construction of a flood mitigation scheme, Council will have regard to the opportunities for funding; where Council determines that a developer flood mitigation scheme arrangement is appropriate, it shall call for Expressions of Interest for participation in such a scheme; expression of Interest documents clearly identify the hydraulic parameters and cost sharing proposal, which form the basis for the developer flood mitigation scheme arrangement.
<p>PC20</p> <p>Use of a facility is predominantly dictated by the reasonable hazard that a person would experience during a flood. The ultimate users of the land or facilities should reasonably expect to be able to evacuate to a place of refuge, appropriate to the time of day and weather conditions.</p>	<p>AS20</p> <p>Flood immunity for the identified developments is consistent with the Table to Acceptable Solution AS20.</p>

Table to Acceptable Solution AS20 - Risk Management and Freeboard

Land Use	Specified Minimum Flood Annual Exceedance Probability (AEP)	Design Freeboard Above Specified Flood to Floor Level (mm)
Major Electrical Switch Yards	0.2% AEP	500mm
Fire and Police Stations	0.5% AEP	400mm
Places of Refuge	0.5% AEP	400mm
Electricity Substations	0.5% AEP	400mm
Sewage Treatment Plants	0.5% AEP	400mm
Homes for the Aged/Hospice	0.5% AEP	400mm
Residential Building Platforms	1.0% AEP	not specified
Habitable Rooms	1.0% AEP	300mm
Food Storage	1.0% AEP	300mm
Hotel Residential	1.0% AEP	300mm
Schools	1.0% AEP	300mm
Commercial	2.0% AEP	not specified
Light Industrial/Warehousing	2.0% AEP	not specified
Open Space	not specified, but ancillary structures are subject to appropriate hazard considerations	not specified
Rural	not specified	not specified



The following explanations relate to the **Table to Acceptable Solution AS20**:

Fire and Police Stations

The requirements do not apply to 'shop front' facilities or facilities that would not be utilised during a flood emergency.

Electricity Switchyards and Substations

The freeboard specified will apply to switchyard components necessary for the operation of the facility during a flood emergency. The determination of what constitutes a major facility rests with the South East Queensland Electricity Board or its successor.

Sewage Treatment Plants

It is intended that sewage treatment plants will remain operational during a flood emergency for the specified flood. This does not mean that the general level of the land will be at the 0.5% AEP flood level, but that bunds, electrical and mechanical equipment will not be at risk of inundation during the specified flood.

Homes for the Aged and Hospice

The flood immunity specified for homes for the aged and hospice is to satisfy the objective of not adding to the burden of flood emergency services.

Schools

It is not intended that all rooms within a school necessarily require a 1% flood immunity. However, there should be a sufficient allocation of teaching space immune from flooding, as specified, so that the total school population can be accommodated after a flood, and the school can resume its normal educational function.

Commercial and Industrial

Freeboard is not specified, as it is considered that commercial risk provisions should apply. If such land is developed to a flood immunity less than 1% AEP, Council may endorse the rates notices accordingly.

Access to Land

It is intended that, during a flood emergency, neighbourhood communities will continue to function as social entities without adding to the emergency response burden, and people will be able to walk from one dwelling to another, experiencing, at worst, negligible flood hazard conditions. It is hoped that local communities will be virtually self-sufficient for the duration of the flood emergency.

Access to land should generally conform to the requirements of the land use served by the road, as indicated in **Table to Acceptable Solution AS20**, without requiring freeboard. However, a tolerance of 200 mm is permitted for longitudinal road drainage purposes.

Facilities provided will be constructed at a height that will provide immunity from a flood of at least the specified annual exceedance probability, together with an allowance for freeboard, as specified in **Table to Acceptable Solution AS20**.

Performance Criteria	Acceptable Solutions
Reconfiguring a Lot	
PC21 Subdivision of land must contribute to a land use pattern consistent with the intent of this LAP, favouring large lots to protect nature conservation values and to maintain water storage and landscape values, and providing for smaller lots in concentrations of residential activities.	AS21.1.1 The minimum lot size is no less than four hectares. OR AS21.1.2 The minimum lot size is not less than 4,000m ² in association with a subdivision consistent with PC3 Hinterland Protection of the Specific Development Code 28 – Reconfiguring a Lot . OR



Performance Criteria	Acceptable Solutions
	<p>AS21.1.3 The minimum lot size is not less than 600m², in association with an approval for an MCU, for land proposed to be developed using the land use descriptions provided in Subclause 8.4 of this LAP as being either:</p> <ul style="list-style-type: none"> a) Residential Low/Medium Density; b) Mixed Residential Tourism. <p>OR</p> <p>AS21.1.4 For the area of land east of Mudgeeraba Road, west of Pacific Motorway and north of Narrabundah Road, comprising lots described as 3WD4506, 5WD1997, 8WD4504 and 102RP142693, the minimum lot size is 4,000m², with the mean average of all the lots in the total area of the subdivision not exceeding 8,000m² and with no lots exceeding 15,999m².</p>
<p>Amenity Protection</p>	
<p>PC22 The proposed use must not detract from the amenity of the local area, having regard, but not limited, to the impact of:</p> <ul style="list-style-type: none"> a) noise; b) hours of operation; c) traffic; d) lighting; e) signage; f) visual amenity; g) privacy; h) odour and emissions. 	<p>AS22 No acceptable solution provided.</p>
<p>PC23 The proposed development must take into account and seek to ameliorate any negative aspects of the existing amenity of the local area, having regard, but not limited, to the existing impact of:</p> <ul style="list-style-type: none"> a) noise; b) hours of operation; c) traffic; d) lighting; e) signage; f) visual amenity; g) privacy; h) odour and emissions. 	<p>AS23 No acceptable solution provided.</p>
<p>Residential Use</p>	
<p>PC24 Residential development must be designed and located to promote a landscaped living environment and to deliver a consistently high standard of residential amenity that complements the predominant open space and nature conservation character of the LAP area.</p>	<p>AS24.1 No residential uses occur within a one kilometre radius of the Gold Coast City Council Treatment Plant, unless:</p> <ul style="list-style-type: none"> a) further improvements to the treatment works eliminate the potential for unpleasant odours within this buffer area; or b) it can be demonstrated that a consistently high level of residential amenity can be maintained with regard to unpleasant odours. <p>AS24.2 Residential development does not take the form of a conventional suburban estate.</p>



Performance Criteria	Acceptable Solutions
<p>PC25</p> <p>All proposed land uses must be compatible with any neighbouring residential land uses and the maintenance of an adequate standard of residential amenity.</p>	<p>AS25.1</p> <p>A landscaped buffer area with a minimum width of 50 metres is provided between industrial uses and residential uses.</p> <p>AS25.2</p> <p>The development design minimises the generation of excessive noise within residential areas.</p> <p>AS25.3</p> <p>Adequate vehicular access is provided, without the need to use residential access roads for significant volumes of non-residential traffic.</p> <p>AS25.4</p> <p>The development design avoids the generation of obnoxious or unpleasant odours.</p>

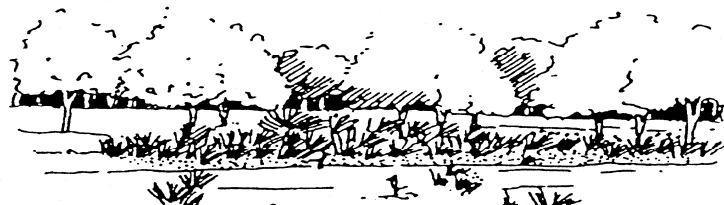
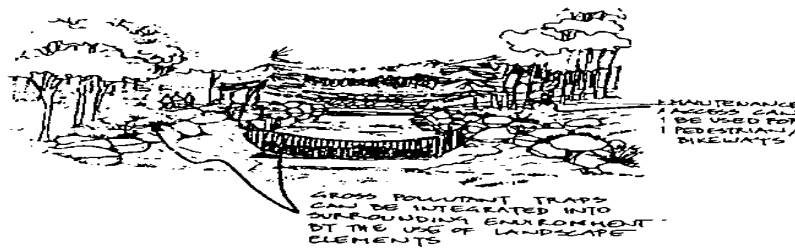
Tourism Uses

<p>PC26</p> <p>Tourism uses which are based on the open space and nature conservation attributes of Guragunbah are favoured in this LAP. In particular, ecotourism initiatives are to be promoted.</p>	<p>AS26</p> <p>The development of ecotourism facilities is based on the LAP area's natural features and nature conservation values.</p>
--	---

Environmental Considerations

<p>PC27</p> <p>Best management practices must be utilised, in order to ensure that litter, sediment and other suspended solids do not detrimentally impact on water quality.</p>	<p>AS27.1</p> <p>Grass swales and buffer zones are used to catch sediment and promote use of natural flow paths.</p> <p>AS27.2</p> <p>Well accepted sediment and erosion control measures are used, including Gross Pollutant Traps, screening, retention and detention basins.</p>
--	---

Design Guidelines for AS27.1 and AS27.2



<p>PC28</p> <p>Areas designated on Guragunbah LAP Map 14.3 – Open Space as High Conservation Significance Areas must be protected from development and retained for their natural values. Two types are denoted – Ecological Value Areas and Visual Value Areas.</p>	<p>AS28.1</p> <p>The High Conservation Significance Areas – Ecological Values are protected by use of constructed or existing wetland systems to filter sediments, pollutants and nutrients.</p>
---	--



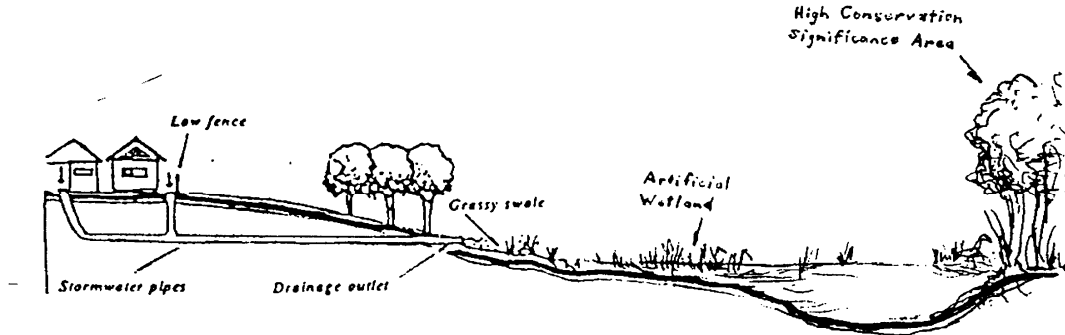
Performance Criteria	Acceptable Solutions
	<p>AS28.2</p> <p>The natural qualities of the High Conservation Significance Areas are enhanced through planting of appropriate species, removal of weeds and other inappropriate species, or fencing of the area.</p>
<p>PC29</p> <p>Development of sites adjoining High Conservation Significance Areas – Ecological Value must be undertaken in a manner that ensures that these identified areas are not degraded.</p>	<p>AS29</p> <p>All developments implement at least the following measures to reduce impacts on the adjoining High Conservation Significance Areas:</p> <ol style="list-style-type: none"> control sediment on the site where disturbance occurs; treat stormwater adequately, prior to its discharge from the site; ensure that any work that may be undertaken has no significant adverse impact upon groundwater levels; minimise the risk of fire spreading.
<p>PC30</p> <p>Areas with significant visual landmarks or features identified on Guragunbah LAP Map 14.3 – Open Space as High Conservation Significance Areas – Visual Value must be maintained and enhanced. The key components that make up their designation include:</p> <ol style="list-style-type: none"> the landform itself (as a visual feature set against the largely flat landscape of the flood plain); the existing undeveloped nature of the area; the existing vegetation; the public views of the landmark or feature; from other parts of the flood plain, surrounding communities and transport corridors. 	<p>AS30</p> <p>Land identified as High Conservation Significance Areas – Visual Value is to be retained predominantly in its current state. These identified areas are protected through the following:</p> <ol style="list-style-type: none"> no changes to the landform, other than minor changes to the ground level necessary to achieve individual building pads and local access roads. Proposed landform changes will be assessed against their impact on the character of the surrounding landscape setting; retention of significant mature trees. Proposed vegetation removal is assessed against its impact on visual amenity; buildings and structures are sited below the predominant tree line and designed to visually integrate into the landscape. Proposed buildings and structures are assessed against the impact on existing views, and the impact on the character of the surrounding areas, through siting, form and massing; building materials and colours are recessive colours and non-reflective. Proposed buildings and structures are assessed against the impact on the character of the surrounding areas through the use of materials and colours.
<p>PC31</p> <p>Development of sites adjoining High Conservation Significance Areas – Visual Value, must be undertaken in a manner that ensures that these identified areas are not degraded.</p>	<p>AS31</p> <p>All development on land adjacent to a High Conservation Significance Area meets the following minimum criteria:</p> <ol style="list-style-type: none"> no significant modification or any adverse impact upon existing groundwater conditions; no adverse effects on water quality, including effects from acid sulfate soils and stormwater runoff; provision of a suitable buffer between existing and proposed urban development and wetlands; minimise the opportunities for the introduction of weeds and other inappropriate species; minimise the opportunities for domestic animals and unregulated human access.



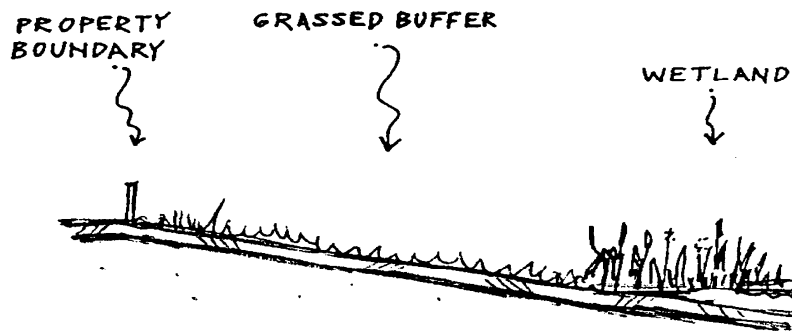
Performance Criteria	Acceptable Solutions
----------------------	----------------------

Design Guideline to Acceptable Solution AS31

Treatment systems, such as artificial wetlands or detention basins, should be located off stream and utilise natural topographic features.



Buffers such as Vegetated Filter Strips (or grassed buffers) be utilised as a barrier and to filter inflow to wetlands. These areas provide a trap for sediment, reduce the possibility of erosion and protect residential amenity by providing a break between backyards and wetland areas. Stiff grass barriers and grassed filter strips (resembling a golf course 'rough') should be maintained, with a grass strand length longer than 50mm. Well trimmed grassed areas are less effective, although visually they may be more desirable.



PC32
Development of sites identified as Moderate Conservation Significance Areas must be undertaken in a manner that ensures that these areas are not degraded.

AS32.1
Development of land identified as Moderate Conservation Significance Areas achieves the following:

- a) retention of a significant proportion of existing mature trees. Proposed vegetation removal is assessed against its impact on visual quality and landscape character, the significance of the vegetation to be removed and the impact on flora and fauna;
- b) limited changes to the landform to provide building pads and local access roads. Proposed landform changes are assessed against their impact on the visual quality and landscape character and the impact on flora and fauna;
- c) provision of an appropriate vegetated riparian buffer strip along any existing watercourses;
- d) any buildings and structures are sited below the predominant tree line and designed to visually integrate into the surrounding landscape. Proposed buildings and structures are assessed against the impact on existing views and the impact on the character of the surrounding areas, through siting, form, massing, materials and colour.

AS32.2

Enhancement of the natural qualities of the identified areas includes planting of appropriate species, removal of weeds and other inappropriate species, or fencing of the area.



Performance Criteria	Acceptable Solutions
<p>PC33</p> <p>The design of development associated with existing or proposed waterbodies, must seek to enhance environmental values.</p> <p>Note: <i>The flood plain contains a number of existing waterbodies, including largely intact wetland remnants, degraded wetland areas, natural creeks and rivers and artificial drains. As areas are developed for residential, tourism and other land uses, additional waterbodies may be created. These could be quite considerable in their extent.</i></p>	<p>AS33.1</p> <p>Development proposals are designed to ensure that:</p> <ol style="list-style-type: none"> existing water quality across the Nerang River system, tributaries, flood plain and canals is not adversely affected by either cumulative or isolated effects; the existing water quality is enhanced, where possible, in areas of degraded water quality or in areas that affect the water quality of degraded areas; the expected water quality is appropriate for the proposed use of the proposed waterbody; opportunities for the breeding of biting insects are minimised. <p>AS33.2</p> <p>Non-powered recreational boating is encouraged in all waterbodies, where compatible with ecological sustainability. Development proposals provide access to waterbodies, where appropriate, for recreational purposes.</p> <p>AS33.3</p> <p>Powered boating is discouraged, except in specific areas where it can be shown that disturbances caused by boats do not damage ecosystems, erode shorelines or adversely affect residential amenity. Power boat operations are strictly controlled and limited as to boat dimension, power rating, speed and travel routes.</p> <p>AS33.4</p> <p>Access to waterway shorelines for recreational purposes is managed to ensure that riparian ecosystems are not adversely affected.</p> <p>AS33.5</p> <p>Materials used in any built structures, associated with recreational activities in waterway areas, are of durable, low maintenance materials which are visually appropriate to the character of the waterbody environment.</p> <p>AS33.6</p> <p>Guragunbah LAP Map 14.4 – Water Environments designates areas suitable for brackish water and freshwater environments. Brackish waterbodies are consistent within the area shown as a Potential Brackish Water Environment and where it can be demonstrated that the proposed development is compatible with existing and approved waterbodies.</p> <p>AS33.7</p> <p>A vegetated buffer area, a minimum of 25 metres, is provided between all proposed built development and freshwater waterbodies, including lakes and wetlands. The appropriate width of the buffer area is determined by the need to:</p> <ol style="list-style-type: none"> ensure the long term health of the ecosystem; accommodate stormwater treatment systems; provide public access, where appropriate; provide for a high standard of visual amenity; maintain adequate standards of residential amenity. <p>AS33.8</p> <p>Design of any waterbodies replicates natural systems typical to the local area and ensures long term ecological sustainability.</p>



Performance Criteria	Acceptable Solutions
	<p>AS33.9 The waterbody design and layout provides areas of appropriate water depth for the aquatic plants proposed. Soft edge treatments are encouraged, thereby allowing full interaction between terrestrial and aquatic vegetation. Bed depths and bank profiles are varied within a system to allow a number of diverse ecosystems to be established in a similar manner to the natural system.</p> <p>AS33.10 Freshwater systems, particularly in relation to water quality performance, are optimised by the use of relatively shallow shorelines extending a short distance offshore to actively promote the growth of suitable fringing species. Control will be required during the early stages of growth to prevent the intrusion of weed species. More steeply shelving profiles are adopted away from the shore to reduce growth potential.</p>

Guidelines to Acceptable Solutions for PC33

The following general guidelines are for a classic wetland design only and are meant to provide a general list of factors which should be addressed.

Location

- a) Locate wetland areas near to, or on the edges of, existing vegetation to maximise regeneration.
- b) Use existing depressions to minimise soil and plant disturbance.

Design

Size

- a) The design of wetlands should take into account irregularity of water supply during dry periods and longer periods of inundation.
- b) The size of a wetland area has almost as many variables as there are types of wetlands. Much depends on the level of management envisaged, surrounding land use and the purpose of the wetland.
- c) Wetland areas should be designed to allow for partitioning and drainage for maintenance purposes, where appropriate.

Form

- a) An inlet zone should be included in the design to collect hydrocarbons, gross pollutants and larger particle sediments.
- b) An open water zone should be located close to the inlet zone, incorporating a permanent waterbody. May be located elsewhere in the wetland.
- c) A system of wetlands is preferred over individual wetlands.
- d) Edges should have low gradients and be long and irregular, to provide natural willows and inlets for feeding and roosting for a diversity of species.
- e) Design resting banks around the edges of the wetland so they emerge from the water at different levels and in different parts of the year.
- f) If a wetland is large enough, incorporate islands for wildlife, including narrow irregular islands with a long sheltered edge from the prevailing wind.

Depth

- a) Taper banks to a gradient between 1:4 and 1:15 or less, if possible. Willow margins around wetlands can reduce erosion and wave break, and provide habitat for wildlife. A series of bays of an increasing depth of 0-200mm, 200-400mm, 400-1000mm, creates the best range of conditions for water birds.

Deeper Wetlands

- a) Impervious compacted clays liners and/or geotextiles are options to prevent water loss through the bed. Compaction should be to create a liner that allows for the design infiltration rate.
- b) Topsoil over finished surface of the wetland bed to a depth of 150mm and cover with fine gravel to trap nutrients from the soil. This helps plants establish rapidly.

Shallow Wetlands

- a) In an area of low gradient, a low embankment of up to 500mm will create a large and useful wetland without disruption or compaction of soils.



Creating Habitat

- a) Incorporate islands that are narrow and irregular, with a long sheltered edge from prevailing winds (islands with bird colonies can, however, be a source of nutrients and organics, and runoff may require integration, with treatment measures).
- b) The highset point of an island should be no more than 300-400mm above full supply level. To reduce weed problems, create the island 250mm below full water level.
- c) Stack rocks, locate wire netting and pipes underwater, but also provide some protruding rocks for wildlife to rest on.
- d) Place large logs and branches around the edges and the floor of the wetland to provide roosting and resting sites at various levels.
- e) Do not use pesticides or herbicides within 100 metres of the wetland.
- f) Leave dead trees standing or insert some in large concrete pipe (as support structures) into the floor of the wetland.
- g) Provide natural dips, depressions, gullies and tiny bays to provide a niche for a small range of creatures. Rough edges help reduce erosion and wind effects, prior to vegetation becoming established.
- h) Utilise wetland planting for habitat creation.

Vegetation

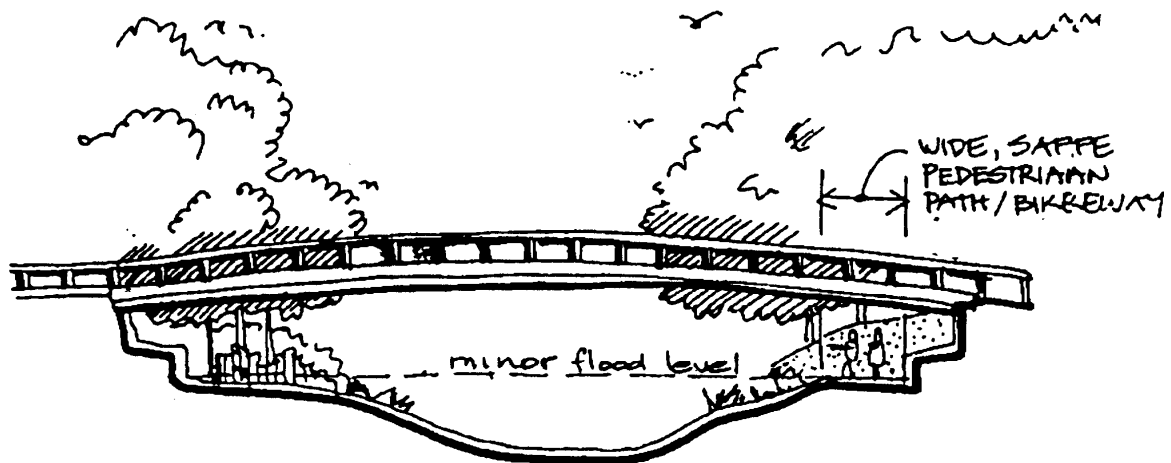
- a) The planting of wetlands should consider the long term management of the wetland.
- b) Most wetland vegetation, with the exception of mangrove, swamp and aquatic plants, require well drained soils (free from heavy clay in order to survive).
- c) Topsoil should be stockpiled to allow for respreading over areas to be revegetated.
- d) A variety of plants should be used, based on water depths, including:
 - floating;
 - submerged, which grow in permanent water up to 1.5 metres deep;
 - emergent species, which grow in semi permanent water;
 - trees and shrubs, which inhabit the drier areas surrounding waterbodies.
- e) Planting in accordance with the basic plant schedule of the **Guragunbah (Merrimac/Carrara Floodplain) Hydraulic Master Plan**.

Performance Criteria	Acceptable Solutions
<h4 style="color: #0070C0;">Acid Sulfate Soil Provisions</h4>	
<p>PC34 Development on land containing acid sulfate soils must not result in environmental harm or damage. Where acid sulfate soils are disturbed, appropriate and effective management must be provided to prevent environmental harm.</p> <p>Note: Guragunbah LAP Maps 14.5a, 14.5b, 14.5c and 14.5d – Acid Sulfate Soils indicate the intensity and depth of potential acid sulfate soils across the flood plain. The information is based on the analysis of soil samples from 180 boreholes across the flood plain, conducted by the Australian Geological Survey Organisation (AGSO), Department of Natural Resources and Mines (DNRM) and the Gold Coast City Council.</p> <p>The maps indicate the total percentage of oxidisable sulfur, in four depth layers across the flood plain:</p> <ul style="list-style-type: none"> ▪ surface to one metre; ▪ one to two metres; ▪ two to three metres; ▪ three to four metres. <p>These layers are based on depth below natural ground surface and therefore should be related to the topography of the land, as at 1996.</p>	<p>AS34 The following development works comply with Specific Development Code 11 – Changes to Ground Level and Creation of New Waterbodies in relation to acid sulfate soil management:</p> <ol style="list-style-type: none"> a) excavation below 5 metres AHD; b) disturbance of soil below the water table; c) alteration to local or regional hydrology by excavation; d) any activity that lowers the water table below the acid sulfate soils layer; e) any area identified as containing possible acid sulfate soils.



Performance Criteria	Acceptable Solutions
Transport and Access	
<p>PC35</p> <p>New development must be consistent with Guragunbah LAP Map 14.6 – Transport Links, which shows potential pedestrian and bike paths that would form a network across the flood plain. The purpose of the pedestrian and bike paths is to:</p> <ol style="list-style-type: none"> provide for public access to public open space areas; link community facilities, retail areas, schools, residential areas and major public transport facilities; provide for a range of travel needs, including commuting, recreational and travel to school. 	<p>AS35.1</p> <p>In new development, pedestrian and bike paths are provided as shown indicatively on Guragunbah LAP Map 14.6 – Transport Links. These are:</p> <ol style="list-style-type: none"> constructed in accordance with Planning Scheme Policy 11 – Land Development Guidelines and AustRoads Design Codes; to link together existing and proposed communities and community facilities, public open space, schools, railway stations, and shopping centres, wherever possible; to link into existing and proposed pedestrian and bike paths, within and on the edge of the LAP area, to form a continuous network; to utilise existing underpasses or overpasses, where appropriate, to cross the Pacific Motorway and railway corridor and provide connections to surrounding communities; be located either along existing infrastructure and waterway corridors or on the edge of proposed open space corridors or as shown on Guragunbah LAP Map 14.6 – Transport Links; where proposed within wetlands designated as High Conservation Significance Areas or Moderate Conservation Significance Areas, to be constructed in a form that avoids adverse impacts on groundwater levels, water quality, existing native vegetation, landscape quality and wildlife habitats (this may necessitate the use of raised decking); where proposed alongside open space corridors, to be constructed to minimise stormwater runoff and visual impact and designed to limit disturbance to wildlife and vegetation. <p>AS35.2</p> <p>Bikeways may be on or off road, depending on the purpose of the bikeway link and the most effective way of providing for bicycle travel.</p>

Design Guideline to Acceptable Solution AS35.1(d)

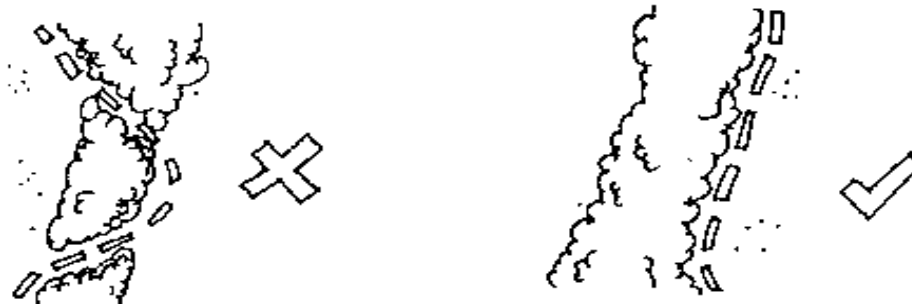




Performance Criteria	Acceptable Solutions
----------------------	----------------------

Design Guideline to Acceptable Solution AS35.1(e)

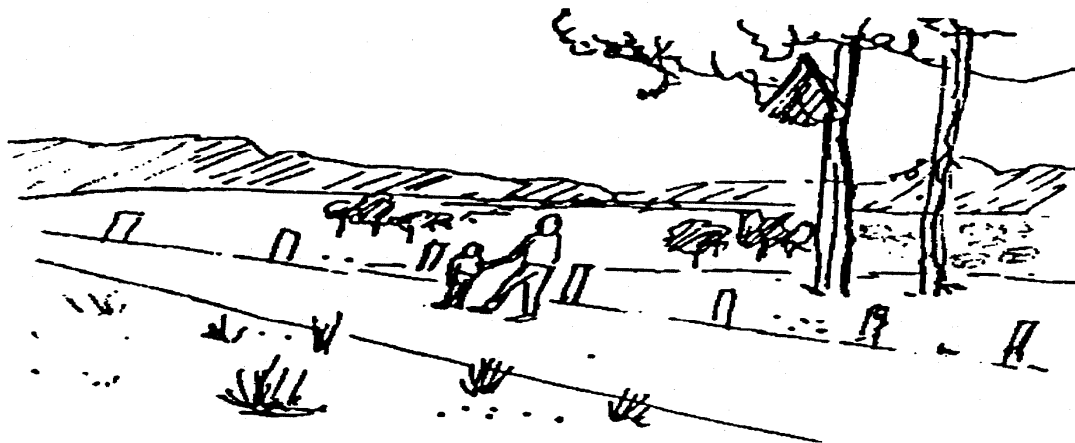
Pedestrian and bike paths to be sited along the edge of open space corridors and wetland areas to minimise disturbance.



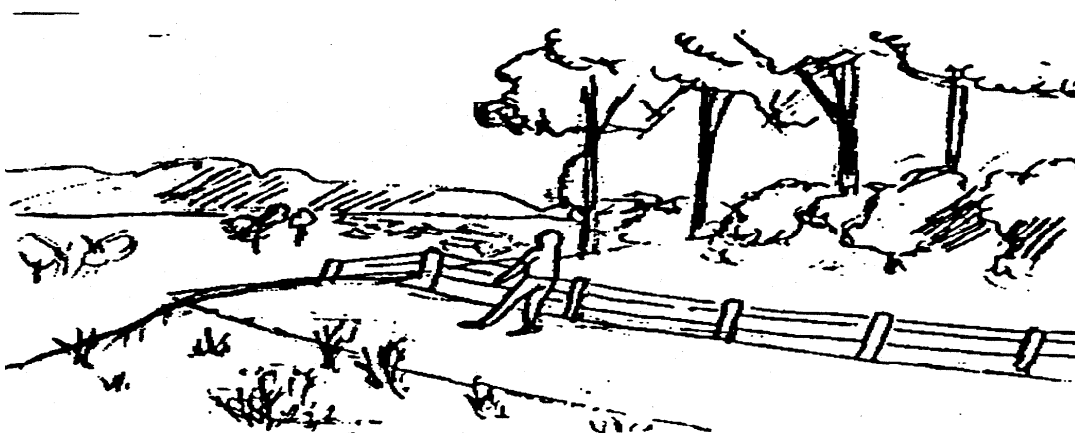
Design Guideline to Acceptable Solution AS35.1(g)

Pathway surfaces should be constructed of permeable materials, such as gravel or an equivalent surface. Surfacing should be low maintenance and 'flush' with the ground so as to not impede flood flow.

One metre high CCA treated (or equivalent) fence posts at two metre spacings could designate pathway boundaries abutting corridors in flood flow areas. If painted, natural colours should be used. 'Chain wire' fencing or screening is not recommended, as it could become a trap for water-borne debris in flood events.



Pathways not in major flood flow areas, and particularly those running adjacent to High or Moderate Conservation Significance Areas, to utilise 'open strand' style fencing or 'chain wire' fencing.

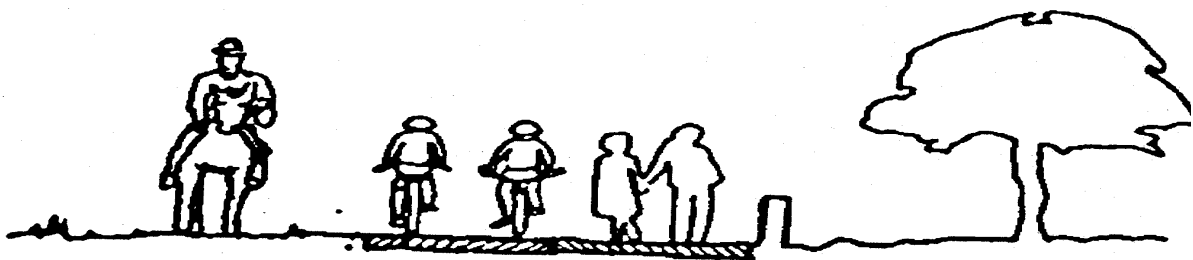




Performance Criteria	Acceptable Solutions
Roads	
<p>PC36</p> <p>Where major road improvements are proposed, it is also important that these are designed to be complementary to the aims of the LAP. The flood plain is already highly serviced by major roads and only two new road links are proposed in the LAP. The extension of Ghilgai Road, to link to the Robina Town Centre, will provide an important link between Gold Coast City Springbrook Road, the Merrimac community and Robina Town Centre, a Key Regional Centre. The extension of Nielsens Road will provide links between Nerang, Carrara and the coastal areas. In addition, the Integrated Regional Transport Plan (IRTP) seeks to retain and protect the southern portion of the Intra-Regional Transport Corridor/Smith Street Connection from Stapylton Jacobs Well Road to Nerang Broadbeach Road.</p>	<p>AS36.1</p> <p>Where relevant to the proposed development:</p> <ul style="list-style-type: none"> a) provision is made for the extension of Ghilgai Road to link to the Robina Town Centre (this road will be designed to be a two lane road with no direct lot access); b) provision is made for the extension of Nielsens Road; c) provision is made for the proposed Intra-Regional Transport Corridor. <p>AS36.2</p> <p>All proposed new roads or proposed widening or realignment of arterial, sub arterial or collector roads, are designed as public transport routes. Sites are identified for necessary infrastructure, such as bus stops and shelters.</p>
Bridle Trails	
<p>PC37</p> <p>In new development, bridle trails must be provided as shown indicatively on Guragunbah LAP Map 14.6 – Transport Links. An existing bridle trail runs along the Carrara Floodplain, south of the Nerang Broadbeach Road. A bridle trail is also proposed to link an existing pony club at Mudgeeraba to the flood plain. These will enable links to be provided to significant areas of public or private open space within the flood plain.</p>	<p>AS37</p> <p>Bridle trails are provided as shown indicatively on Guragunbah LAP Map 14.6 – Transport Links. These are to:</p> <ul style="list-style-type: none"> a) be adjacent to the proposed pedestrian paths and bikeways, but designed to minimise any conflict between the different modes of transport; b) be a minimum of four metres wide; c) link to existing bridle trails, where possible; d) avoid existing or proposed wetland areas and High Conservation Significance Areas; e) be designed to minimise any adverse impacts on existing or proposed native vegetation, within Open Space Corridors.

Design Guideline for Acceptable Solution AS37(a)

Trail surface to be constructed of suitable materials and located on the edges of corridors and away from wetlands. Pedestrian and bike paths to be located between the bridle trail and the edge of the open space corridor to minimise disturbance.





Performance Criteria	Acceptable Solutions
Canoe Trails	
<p>PC38 New development in the Guragunbah area must support the establishment of a canoe trail network. The LAP seeks to provide opportunities for the development of a network of canoe trails within the flood plain, through the linking of existing and proposed waterways. These could form a recreational asset for residents as well as a potential tourist attraction. Such canoe trails could follow existing rivers, creeks and drains (including Mudgeeraba Creek, Gin House Creek, Main Drain, Nerang River and Worongary Creek), any realigned or proposed watercourses, as well as suitable canals, lakes and wetlands. In many cases, they will coincide with identified Core Floodway areas. The intention is to provide for a variety of environments along the canoe trail network, including narrow waterways, rivers, creeks, canals and lakes.</p>	<p>AS38 Waterways are designed to provide opportunities for canoe trails. This includes:</p> <ol style="list-style-type: none"> linking with existing waterways to form a continuous network, wherever possible. Where continuous waterways are not possible, overland public access areas may be required to allow for canoe transport; providing opportunities for public access to the waterway and for appropriate ramp or step structures along the waterway edge; providing for a varied and interesting environment. Where new or realigned waterways are proposed, these should be designed as organic shapes, in preference to geometric shapes, and should include the replication of natural creek edge elements.

Design Guideline to Acceptable Solution AS38(a)

Canoe trails are to include 'portage' areas where continuous water travel is not possible. Aluminium slides, low formed steps or 'wood and chain' ramps can be provided at the waters edge to allow for ease of retrieval for overland canoe transport to the next waterway and to provide for uniform access/egress points.

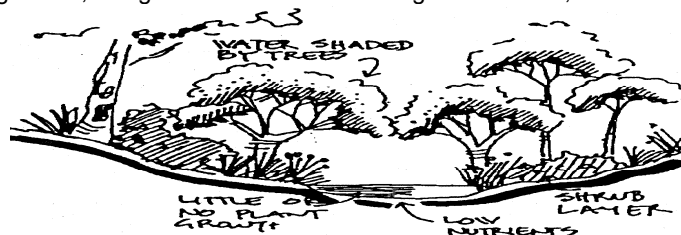


Design Guideline to Acceptable Solution AS38(b)

Various types of waterbodies may be utilised for canoe trails, ranging from narrow and relatively shallow channels (three metres wide and one metre deep), through to drains, lakes and canals. Meandering courses, linked to existing water features, will help to add interest. Concrete edging, uniform design and sparse planting should generally be avoided.



Naturally occurring creek edge elements are to be replicated for artificial waterways. This should include the provision of riparian vegetation, using a combination of native ground covers, shrubs and tree cover.



Generally, landscaping features and plantings should reflect and accentuate changes from environment to environment - particularly in portage areas to convey a 'sense of arrival'. Canoe trails should lead to destinations or points of interest, such as Woody Hill or wetlands, to provide variety and interest.



Performance Criteria	Acceptable Solutions
Water Based Public Transport	
<p>PC39</p> <p>It is important that opportunities are retained for the future provision of boat services linking the flood plain to the coastal areas of the Gold Coast City, including Surfers Paradise. The flood plain has potential for water based transport, including commercial commuter ferry or tourist cruise services. Mudgeeraba Creek and connecting waterways have been designed to be navigable for boat traffic to Robina, and the Nerang River is also navigable for much of its length. In particular, there are opportunities to provide water transport links to the two new railway stations at Nerang and Robina.</p>	<p>AS39</p> <p>New development is to preserve opportunities for boat terminals, as shown on Guragunbah LAP Map 14.6 – Transport Links, close to the Robina Railway Station and the Robina Town Centre, and on the Nerang River, close to the Nerang Railway Station.</p>
Other Transport Modes	
<p>PC40</p> <p>There is potential for the flood plain to accommodate a variety of other transportation systems in the medium to long term. These may include:</p> <ul style="list-style-type: none"> a) a cable car or gondola cableway system; b) light rail; and c) a monorail system. <p>In new development, consideration should be given to the provision of suitable alternative transportation networks.</p>	<p>AS40</p> <p>In major new developments, consideration is given to providing alternative transportation systems to service tourists and/or commuters and local residents. Links could be provided to such destinations as:</p> <ul style="list-style-type: none"> a) Robina Town Centre; b) Robina Railway Station; c) Nerang Railway Station; d) resorts and golf courses, within and around the flood plain; e) coastal areas of the Gold Coast City; and f) the hinterland.
Managing Impacts on Water Quality	
<p>PC41</p> <p>Development must be designed to minimise adverse stormwater impacts, and incorporate on-site stormwater treatment devices that provide a high level of protection to areas of conservation significance and to the water quality of downstream receiving environments.</p>	<p>AS41.1</p> <p>Stormwater is not discharged directly to, or within, areas of conservation significance without prior settling and filtering in appropriately designed detention areas.</p> <p>AS41.2</p> <p>Detention areas are designed to detain and filter at least the first 20mm of runoff.</p> <p>AS41.3</p> <p>There is no net increase in pollutant loads entering existing wetlands and waterways.</p> <p>AS41.4</p> <p>The development uses the best available techniques (eg. detention basins and bunds) to minimise the formation of sediment laden stormwater (which could adversely affect wetlands), and to prevent the discharge of such runoff waters into wetlands or associated waterways during the development construction phase.</p> <p>AS41.5</p> <p>The development is provided with a sewage disposal system which is sufficient for the size, peak volume of wastewater generated and the location of the development, such that it does not cause water pollution.</p>
<p>PC42</p> <p>The development minimises the extent of impervious surfaces (which result in high volume stormwater runoff) adjacent to watercourses.</p>	<p>AS42</p> <p>No acceptable solution provided.</p>



Performance Criteria	Acceptable Solutions
<p>PC43 The proposed development must be conducted and managed so that the use of any pesticides and/or herbicides will not be detrimental to water quality.</p>	<p>AS43 No acceptable solution provided.</p>
Infrastructure Provisions	
<p>PC44 Development must provide water supply and sewerage services.</p>	<p>AS44.1.1 Development complies with the servicing provisions of Specific Development Code 28 – Reconfiguring a Lot as if the land was included in the Park Living Domain. OR AS44.1.2 Where the accommodation density of tourist or residential accommodation is increased above that for the Park Living Domain, a sewerage treatment facility is provided that achieves a consistently very high standard of output or connection is made to Council's wastewater treatment system.</p>
Agriculture Amenity Impacts	
<p>PC45 Where a sensitive receptor is proposed adjacent to agricultural activities undertaken on a site identified on Overlay Map OM2 – Good Quality Agricultural Land, the impacts from agricultural activities, including chemical spray drift, odour, noise, dust, smoke and ash, must not adversely affect community public health, safety and amenity. Note: <i>For the purposes of PC45, Sensitive Receptor is defined as a dwelling, mobile home or caravan park, residential marina or other residential place in a residential development, a motel, hotel or hostel, a child care centre, kindergarten, school, university or other educational institution, or a medical centre or hospital.</i></p>	<p>AS45.1 The sensitive receptor is adjacent to agricultural activity that emits noise and a separation distance between the sensitive receptor, and the agricultural land is in accordance with solutions outlined on Page 16 of the Planning Guidelines: Separating Agricultural and Residential Land Uses – August 1997 (DNRM, DGLP). AS45.2 The sensitive receptor is adjacent to agricultural activity that emits odour, dust, smoke, ash or chemical spray, and a separation distance between the sensitive receptor and the agricultural land is not less than 500 metres.</p>

8.4 Conceptual Land Use Map

Guragunbah LAP Map 14.7 – Conceptual Land Use represents a synthesis of the constraints and opportunities identified in the detailed **Guragunbah LAP Maps 14.2 to 14.6**, along with consideration of a range of land use opportunities. This illustrates how these different elements might be brought together into a comprehensive long term vision for the flood plain. **Guragunbah LAP Map 14.7 – Conceptual Land Use** represents one vision for the flood plain, but considerable flexibility is provided in the LAP to facilitate innovative and alternative development proposals, which may result in a different final development form.

Guragunbah LAP Map 14.7 – Conceptual Land Use is not a land use zoning plan and does not confer or remove use rights. It is intended to be indicative, and boundaries do not necessarily relate to cadastral boundaries. The notations on the map do not necessarily imply that the land is suitable for that land use. Whilst account has been taken of the overall constraints and opportunities at a strategic level, any development approval will still be subject to detailed hydraulic, environmental and planning investigations and will be assessed against the LAP provisions.

The land uses categories, shown on **Guragunbah LAP Map 14.7 – Conceptual Land Use**, are explained in the table in **Subclause 8.4.1**.



8.4.1 Explanation of Land Use Categories

Land Use Category	Sub-Category	Explanation
Residential	Rural-Residential	Detached single or dual occupancy residential dwellings on large semi-rural blocks, or equestrian based resort/residential development (refer to Part 4.4.1, Guragunbah (Merrimac/Carrara Floodplain) Tourism Strategy). Minimum lot size generally intended to be not more than one dwelling per 4,000m ² .
	Low-Medium Density	Detached residential dwellings and townhouses and minor ancillary uses. Includes resort style residential developments and retirement homes. Density intended to be not more than 25 units per hectare.
Mixed Residential/ Tourism Uses		A mix of residential developments (including apartment blocks, townhouses, resort style residential developments and limited detached dwellings), tourist facilities (including hotel accommodation and attractions), local commercial and ancillary uses, and recreational uses. Smaller land parcels should be amalgamated to enable an integrated development form.
Commercial Industry		A mix of industrial, limited commercial development and small scale offices or showrooms, which would not adversely impact on surrounding residential development.
Local Commercial/ Community Facilities		This predominantly reflects existing land uses, and includes uses such as cemeteries, retail nurseries, social clubs, churches and kindergartens.
Tourism	Built Development	Resort hotels, tourist attractions, theme parks, education and interpretation centres and clubhouses, with limited ancillary resort style residential.
	Open Uses	Tourism uses within an open setting, including active and passive recreation and uses associated with adjacent 'Tourism – Built Development' areas.
Schools		Existing public and private schools.
Open Space	Active/Passive Recreation	Public and private open space used for active and passive recreation, including ancillary buildings, existing and proposed golf courses and some existing public open space.
	Passive Recreation	Public and private open space, used for passive recreation, including some existing public open space, core floodways and wetland areas.
	Conservation Areas	High Conservation Significance Areas.
	Open Space Corridors	Open Space Corridors, including existing watercourses and core floodways.
	Waterways	Existing and proposed waterways, lakes and canals.
	Wetlands	Existing and proposed wetlands.
Major Events Precinct		One or more facilities catering for major sports, tourism and special events.
Pedestrian and Bike Paths		Pedestrian and bike paths (both on and off road) providing public access to public open space areas, linking community facilities, retail areas, schools, residential areas and major public transport facilities, and providing for a range of travel needs, including commuting, recreational and travel to school.
New Roads and Road Improvements		Extension of Ghilgai Road to link to the Robina Town Centre, extension of Nielsens Road, upgrading of Nerang Broadbeach Road and proposed Intra Regional Transport Corridor.
Boat Terminal		Opportunities for boat terminals close to the Robina Railway Station and Robina Town Centre, and on the Nerang River, close to the Nerang Railway Station.
Railway Station		Queensland Railway Stations at Nerang and Robina.