Appendices

Appendix 5

Precinct Descriptions

Precinct 1 - Torquay North

This precinct is located north of Deep Creek and comprises one of the key growth areas for Torquay and the Shire. The area is characterised by conventional suburban housing with a scattering of more innovative contemporary developments. There is limited indigenous vegetation with most gardens comprising a mix of exotic and non-indigenous native species in formal gardens.









Key Characteristics

- □ Lot sizes range from 300sqm to 800sqm with a small number of lots less than 300sqm in area
- Houses built since the 1980's a mix of architectural styles. Predominantly conventional suburban architecture with some innovative contemporary beach styles in more recent development.
- Low vegetation cover, predominantly exotic formal gardens of no conservation significance
- □ Limited views available toward the coast from some properties, however there is inadequate slope to enable views from all properties.
- □ Land gradually slopes to the east, with steeper slopes to the west adjacent to the creek
- □ Mix of single and two storey development
- Predominantly conventional building materials with some contemporary finishes used in more recent development
- Mix of building colours
- □ Small front and side building setbacks with many boundary walls. Development on The Esplanade in particular comprises multidwelling developments constructed across the width of the site.
- **Q** Relatively high building and sealed surfaces site coverage
- Car parking, particularly garages, highly visible from the street
- Mix of front fence treatments, generally either open or low in height
- Side and rear paling fences
- □ Sealed roads with kerb & channel
- Limited sealed footpaths
- Underground infrastructure

- **D** Enhanced vegetation cover, with emphasis on indigenous species.
- D Provide adequate permeable surfaces to facilitate increased vegetation cover
- Architecturally diverse housing that is consistent with the principles of 'Surf Coast Style'.
- Garages setback behind the dwelling frontage
- □ Maintenance of a low scale building height.
- Buildings setback from side boundaries.
- Development that integrates well with the street frontage (ie. no solid high front fences and walls)
- New subdivisions to include well vegetated public land, including linear parks that provide vegetated corridors and pedestrian/cyclist access to existing public open space.
- □ Enhanced street tree & shrub/grasses planting using indigenous species



Precinct 2 - Torquay Central

This precinct comprises the residential areas in central Torquay and extends from Point Danger in the south through to Deep Creek in the north. The precinct also includes the established residential land on the west side of Geelong Road that extends through to Spring Creek. The area is characterised by a mix of original modest beach houses set amongst a moderate cover of vegetation. Considerable infill development has occurred in recent years, however the precinct still retains a low scale coastal character.



Key Characteristics

- □ Lot sizes are in the vicinity of 1000sqm in 'Old Torquay', decreasing to less than 600sqm between Darian Road and Deep Creek. There is a scattering of lots less than 300sqm throughout the precinct, including the lots fronting The Esplanade, between Beach and Darian Roads that are not individually developed.
- Tree-lined streets with a moderate cover of vegetation
- □ Scattered remnants of Bellarine Yellow Gum Woodland of high regional conservation significance with less intact understorey.
- Mosaic of stands and individual trees of Moonah, Drooping Sheoke and Boobialla with areas of non-indigenous natives and exotics. Some indigenous understorey remains including Sea-berry Saltbush and Bower Spinach.
- □ Front setbacks range from 5 to 10+ metres, with the setback areas comprising established trees or open in character.
- Buildings are generally setback from side and rear boundaries with vegetation providing partial screening between buildings, with the exception of new development
- □ Buildings are predominantly single storey, with a greater occurrence of two storeys along The Esplanade and within new developments.
- Building materials are generally traditional light-weight materials weatherboard and fibro-sheeting with a limited contemporary range of materials used in recent development
- Mix of external colours
- Mix of front fence treatments, but greater proportion of open style treatments (ie low or partially permeable high fences).
- Paling fences along side and rear boundaries
- □ Land slopes gradually to the east with inadequate slope for properties to share views
- Services above ground and clearly visible along streets
- Limited number of sealed footpaths. Paths mainly informal.
- □ Sealed roads with kerb & channel

- Retention of indigenous vegetation, and enhancement of the overall vegetation cover, with emphasis on planting of canopy trees in new developments.
- □ Increased density of development, but limits to the extent of building and hard surface site coverage in multidwelling development to facilitate enhanced vegetation cover
- □ Front setbacks that are consistent with the prevailing setbacks in a street and provide for retention and planting of screening trees.
- Side and rear setbacks that provide for planting between buildings
- □ Innovative contemporary housing that is consistent with the principles of 'Surf Coast Style'. Building forms that reflect the original beach shacks are encouraged.
- Limit building height to maintain the low scale character of current development.
- Access and vehicle parking areas that are understated and well integrated with the development
- Development that integrates well with the street (ie. no high front fences and walls)



Precinct 3 – Torquay North-West

This precinct comprises the low density residential area to the north-west of Torquay. The precinct is bounded by Grossmans, Coombes, Messmate and Geelong Road and is dissected by Deep Creek. The precinct is characterised by low density development set amongst mature vegetation.

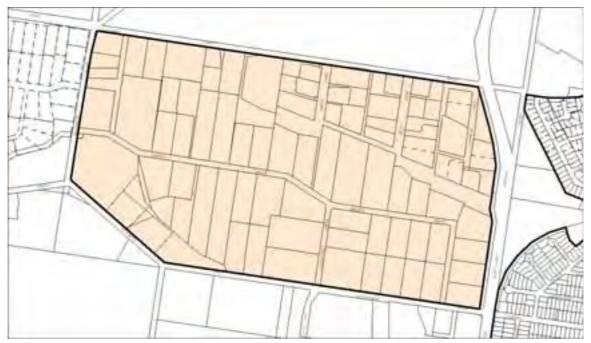




Key Characteristics

- Low density residential lots
- □ High cover of vegetation along the northern part of the precinct which has been identified as the Messmate Woodland Community. The population includes a scattering of trees with less intact understorey of high regional significance.
- □ The other areas within the precinct comprise exotic and nonindigenous native vegetation with no conservation significance.
- Predominantly single storey dwellings
- Part of Briody Drive and Illawong Drive are unsealed with all other roads sealed
- Numerous vacant lots in the eastern half of the precinct
- □ Open style fencing mainly posy and wire
- Significant building setbacks from boundaries

- Retention and enhancement of indigenous vegetation cover
- Innovative contemporary housing that is designed to sit comfortably with the topography



Precinct 4 – Great Ocean Views

This precinct comprises the developing Great Ocean Views estate located to the north of the Great Ocean Road, between Duffields Road and Spring Creek. The precinct is highly visible from the Great Ocean Road and from public open space areas along Spring Creek. The area is characterised by a high coverage of development with limited vegetation cover.









Key Characteristics

- □ Lots sizes range from 300sqm to 800sqm. There are very few vacant lots within the early stages, however later stages of subdivision are currently under construction.
- □ Large suburban and contemporary housing constructed from the 1990's to the present
- Minimal vegetation cover, gardens are generally low level with exotic or indigenous species. Very few canopy trees.
- U Views from most properties toward the ocean and Spring Creek
- Land slopes to the east and south, toward Spring Creek
- Predominantly two storey development
- Mix of conventional and contemporary building materials, with a high proportion of masonry
- Mix of building colours
- D Minimum front and side building setbacks with many boundary walls
- □ High site coverage (buildings and sealed surfaces), with minimal permeable surfaces
- Car parking is highly visible from the street
- Generally no front fences
- □ Side and rear paling fences
- □ Sealed roads with kerb & channel
- Limited footpaths
- Underground infrastructure

- D Enhanced vegetation cover with emphasis on indigenous species.
- □ Innovative contemporary housing that is consistent with the principles of 'Surf Coast Style'.
- Garages setback behind the dwelling frontage
- Development that integrates well with the street frontage (ie. no solid high front fences and walls)
- New subdivisions to include well vegetated public land, including linear parks that provide vegetated corridors and pedestrian/cyclist access to existing public open space.
- Enhanced street tree planting using indigenous species
- □ Maintenance of a low scale building height.



Precinct 5 – Jan Juc (Central)

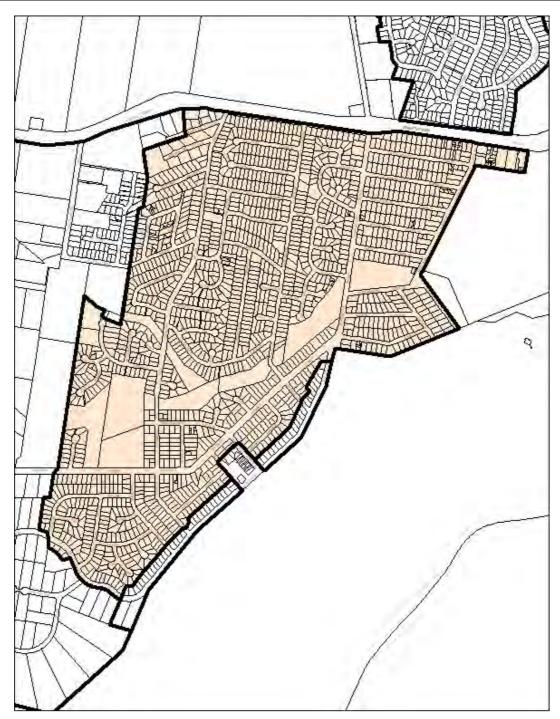
This precinct comprises the Jan Juc residential area with the exception of parts of Ocean Boulevarde. The area is characterised by low scale development nestled amongst established vegetation. Due to the undulating land, most of the residential area is visible from the Great Ocean Road and from other public viewing points throughout Jan Juc.



Key Characteristics

- □ Lot sizes range from 300sqm to 800sqm with a very limited number of lots less than 300sqm. The lots between Duffields Road and Hoylake Avenue are generally larger than other areas within the precinct.
- □ There is a mix of original beach houses and contemporary buildings with a limited number of modern suburban style houses
- □ Tree-lined streets with a medium cover of vegetation across much of the precinct.
- □ There are small stands and individual trees of Bellarine Yellow Gum and Manna Gum of state conservation significance with large areas of non-indigenous natives and exotics. Understorey mostly modified with some remnant understorey in Sunset Strip
- □ Front setbacks range from 5 to 10 metres and are generally vegetated.
- □ Side and rear boundaries are generous and incorporate vegetation for screening between buildings
- □ Buildings are a mix of single and two storey, with many partially elevated dwellings due to the slope
- Building materials are generally traditional light-weight materials weatherboard and fibro-sheeting with limited use of contemporary materials in more recent development
- Mix of external colours
- Mix of front fence treatments, but greater proportion of open style treatments combined with vegetation (ie. no fencing or low and open fencing)
- Paling fences along side and rear boundaries
- □ The land is undulating throughout the precinct which has resulted in low to moderate levels of cut and fill incorporated into developments
- Most properties have limited views of the creek environs or coast, however there is inadequate slope to provide views for all properties
- Services are above ground and clearly visible along streets
- □ The roads are sealed with kerb & channel and footpaths are generally informal

- **D** Retention and enhancement of the vegetation cover, with emphasis on indigenous canopy trees.
- □ Front setbacks that are consistent with the prevailing setbacks in a street and provide for retention and planting of canopy trees
- □ Side and rear setbacks that provide for planting between buildings
- □ Innovative contemporary housing that is consistent with the principles of 'Surf Coast Style'.
- Access and vehicle parking areas that are understated and well integrated with the development
- Development that integrates well with the street (ie. no high front fences and walls)
- □ Maintain low scale building height that is generally within the canopy of the vegetation.



Precinct 6 – Jan Juc (Ocean Boulevarde)

This precinct includes the most prominent residential properties along Ocean Boulevarde, and is characterised by large multi-storey dwellings designed to maximise ocean views. There is a low level of vegetation cover and minimum building setbacks from front and side boundaries. The precinct is highly visible from the Jan Juc cliff top.







Key Characteristics

- Multi-storey modern and contemporary beach houses, designed to maximise views
- Low vegetation cover and mostly non-indigenous and exotic species
- Minimum front setbacks of approximately 6 metres or less with little vegetation cover within the setback areas.
- □ Minimal side and rear boundaries with some boundary wall construction
- □ Building materials are a mix of traditional and contemporary materials with a mix of external colours
- □ There is a mix of front fence treatments, but greater proportion of open style treatments (ie. no fencing or low and open fencing)
- □ Paling fences along side and rear boundaries
- □ The sloping land has resulted in low to moderate levels of cut and fill incorporated into development
- Significant views of the coastline and over Jan Juc to the north
- Services above ground and clearly visible along streets
- The roads are sealed with kerb & channel and footpaths are informal
- Buildings are generally two storey in height, and prominent from the street and distant viewing points due to their location on top of a ridge.

- Retention and enhancement of the vegetation, with emphasis on indigenous species and establishment of vegetation within the front setback areas to improve the interface with the adjoining cliffs
- Low building and hard surface site coverage to facilitate enhanced vegetation cover
- □ Front setbacks that are consistent with the prevailing setbacks in a street and provide for retention and planting of screening trees
- Side and rear setbacks that provide for planting between buildings
- Innovative contemporary housing that is consistent with the principles of 'Surf Coast Style'
- Access and vehicle parking areas that are understated and well integrated with the development
- Development that integrates well with the street (ie. no high front fences and walls)
- Maintenance of a low scale building height, with the avoidance of three storey dwellings which attempt to capture ocean views.



Precinct 7 – Jan Juc West

This precinct comprises the low density residential land to the west of Jan Juc and extends from the Great Ocean Road in the north to Bones Road in the south. The area has a high coverage of vegetation that varies in type and significance. Houses are nestled amongst the vegetation and are often not visible from the road. Some properties are visible from the Great Ocean Road and from the cliff top walk.



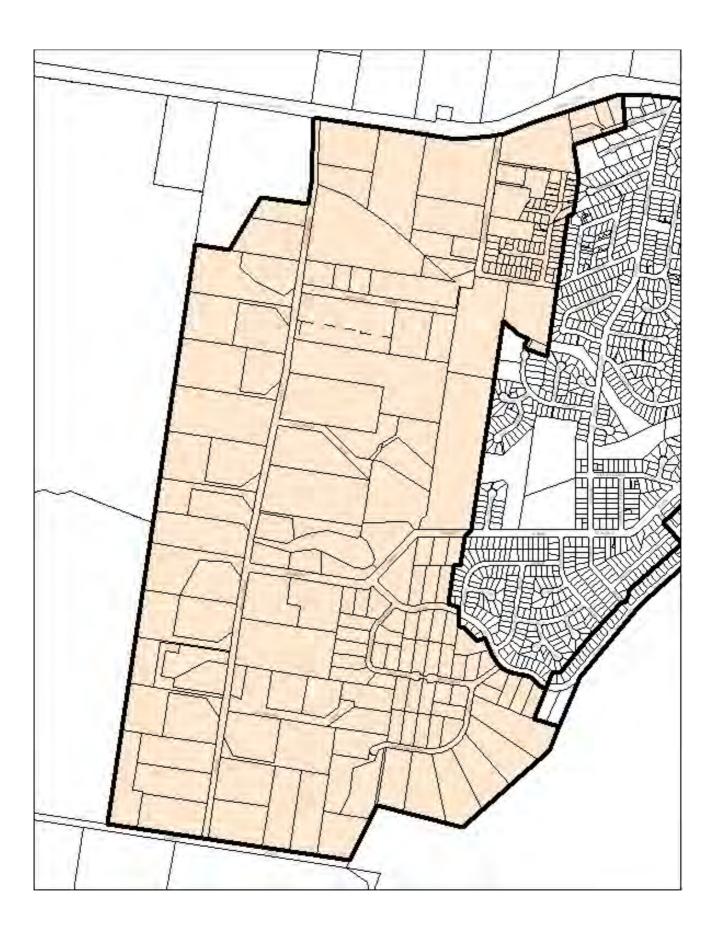




Existing Character

- Low density residential sized lots
- Vegetation dominates the streetscape and buildings are only partially visible from beyond property boundaries, if at all
- □ The vegetation includes populations of Messmate Woodland & Ironbark Woodlands (Bells Boulevard region), and Bellarine Yellow Gum Woodland (Sunset Strip and south of Strathmore Drive)
- Buildings are generally single storey and retained below tree canopy level
- □ Buildings are finished in natural colours that blend with the surrounding environment
- Boundary fencing is limited to post and wire
- Buildings have large setbacks from all boundaries and are surrounded by vegetation
- □ Some properties enjoy coastal views, while others enjoy views over Jan Juc and the vegetated hinterland
- Roads are sealed, but driveways are predominantly unsealed and informal
- □ The land is undulating
- □ Infrastructure services are above ground and visible along the roads

- **Q** Retain and enhance the existing indigenous vegetation cover
- □ Vegetation and open style fencing used to define boundaries and provide screening and privacy for dwellings
- Building heights retained below the established tree canopy or a vegetated backdrop.
- Natural and earthy tones that blend with the site context
- □ Innovative contemporary housing that is consistent with the principles of 'Surf Coast Style' and sits low in the landscape.
- Generous boundary setbacks that respect the dominate setbacks in the area
- Minimal hard surface areas



Appendix 6

Case Studies of Existing Developments

Case Study Developments

The following case study developments have been selected from a combination of photos used in the study of community perceptions by Dr Ray Green and sites selected by Council Officers that exhibit a similar range of characteristics. Each development has been assessed in detail below against the current planning provisions, with conclusions drawn in relation to recommended changes to planning scheme provisions concerning vegetation, building siting, site coverage and hard surface coverage, and plot ratio.

The Neighbourhood Character Compatibility Scale (NCCS) is based on the following scoring:

- 1 to 4 is perceived to be compatible [form strongly (1) to slightly (3.9)]
 - 4 to 7 is perceived to be incompatible [from slightly (4.1) to strongly (7)].

Single Dwellings

Case 1

	Туре:	Two storey (Third storey viewing loft)
	NCCS:	5.41
	Permit No.	99/8643
	Land Area:	459m²
	Height:	8.9m (height of loft located in middle), rest of building below 7.5m)
the same in some the first of	Blg site %:	38% (172m²)
	Blg & H/S %:	61% (280m²)
	Plot Ratio:	0.61 (279m²)
and the state of the second second	Setback:	Front: 5.0m, Side: 3.4m & 1.7m
	Garage:	Double garage, located at rear, setback 7.2m from side boundary, access off side street

Comment:

Planning Scheme Requirements:

Permit issued pre new format planning scheme. Fails to comply with current height, plot ratio, building site coverage and hard surface coverage standards in SLO2.

Note: original application complied with building site coverage, hard surface coverage, and plot ratio before size of lot was reduced from 759m² to 459m² due to subdivision. Complies with Rescode standards. No landscape plan provided.

Neighbourhood Character Assessment:

Good articulation and use of colour, windows and material. Roof form picks up on beach theme. However, the building design emphasizes the building's height, thus making it appear overly bulky and tall. This is made more obvious because of the lack of screen planting, the minimum front setback, and the large size of the upper level compared with the ground level.



Comment:

Planning Scheme Requirements:

Permit issued pre new format planning scheme. Fails to comply with current height, plot ratio and building site coverage standards of SLO2. Minimum front setback.

Neighbourhood Character Assessment:

Building is well articulated, however, its flat roof makes it appear boxy, and the concrete block rendering and colour emphasizes the concrete theme. There is no screen planting to soften the appearance of the dwelling, and the building also has a minimum front setback.

Case 3



Comment:

Planning Scheme Requirements:

No planning permit required under current DDO1 controls. Complies with Building Regulations.

Neighbourhood Character Assessment:

No front fence. Building addresses the street. However, dwelling is suburban looking with little local connection in terms of its design. Minimum setbacks from side boundaries, with little native vegetation in the front setback. Dominant driveway and double garage.

	Туре:	Two storey
	NCCS:	5.06
	Bldg Permit No	. 95/3556
	Land Area:	917m²
THE PARTY OF A PARTY O	Height:	6.2m
	Blg site %:	22% (200m²)
	Blg & H/S %:	41% (375m²)
	Plot Ratio:	0.31 (277m²)
and the second s	Setback:	Front: 7.8m, Side: 0m & 1.6m
	Garage:	Double garage, setback 4.8m from main building line, setback 0m from side boundary

Comment:

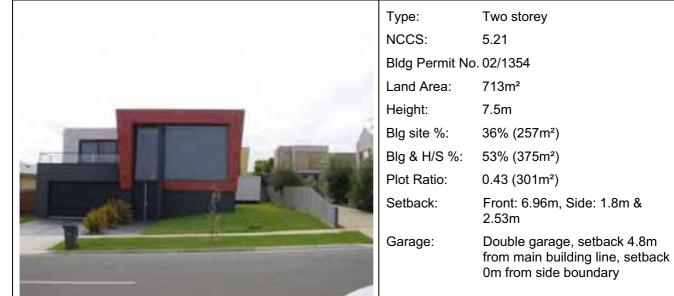
Planning Scheme Requirements:

No planning permit required. Complies with Building Regulations.

Neighbourhood Character Assessment:

Flat roof is inconsistent with coastal style. Lack of eaves accentuates building's bulk. Dwelling appears bulky because of the large size of the upper level compared with the ground level. Lack of screen planting. Front landscaping not in character of area (ie not native), high solid front fence and dominant wide garage and driveway.

Case 5



Comment:

Planning Scheme Requirements:

No planning permit required. Complies with Building Regulations.

Neighbourhood Character Assessment:

Interesting innovative, well articulated design with good use of recessive colours. Use of dark colours for garage combined with its setback behind main building line reduces garage's visual dominance. No front fencing. Square form is imposing on streetscape, and makes building look large on the lot. Lack of front landscaping to screen and soften building.

	Туре:	Two storey split level
States -	NCCS:	2.52
	Bldg Permit No	o. 513
	Land Area:	639m²
AND DESCRIPTION OF THE PARTY OF	Height:	5.18m
	Blg site %:	19% (118m²)
	Blg & H/S %:	28% (176m²)
	Plot Ratio:	0.25 (160m²)
	Setback:	Front: 4.6m, Side: 1.2m & 1.8m
DES	Garage:	Single garage, setback 1.2m from main building line, setback 1.8m from side boundary

Comment:

Planning Scheme Requirements:

No planning permit required. Complies with Building Regulations.

Neighbourhood Character Assessment:

Classic beach house design in terms of its shallow pitched roof, and use of materials. Vegetation along boundaries and in front setback softens and screens building. However, vegetation is predominantly exotic. Small single driveway. Front setback appears larger because of lack of front fencing, and footpath to delineate front property boundary.

Case 7

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Comment:

Planning Scheme Requirements:

No planning permit required at time of construction. Planning permit would be required under current controls because of height above 7.5m. Complies with Building Regulations.

Neighbourhood Character Assessment:

Large front setback, use of vegetation to screen the dwelling and use of materials and dark colour, makes building recede in streetscape and appear unimposing, despite its height. Natural looking driveway. No front fencing. Unimposing carport set beneath dwelling.

|--|

Туре:	Single storey	
Bldg Permit No. 8089 & 98/7244		
Land Area:	597m²	
Height:	4.6m	
Blg site %:	31% (183.9m²)	
Blg & H/S %:	40% (239.2m²)	
Plot Ratio:	0.18 (103.7m²)	
Setback:	Front: 13m, Side: 2m & 0m	
Garage:	Double carport built to side boundary, setback 2.8m from main building line.	

Comment:

Planning Scheme Requirements:

No planning permit required. Complies with Building Regulations.

Neighbourhood Character Assessment:

Large front setback with native landscaping to screen development. Low rise and small scale dwelling. Classic beach house design in terms of its shallow pitched roof, and use of materials. Recessive colours. No front fencing. Unimposing open carport set behind building. Wide dominant concrete driveway.

Case 9



Type:	Split over two levels	
Bldg Permit No. 9412 & 02/2078		
Land Area:	643m²	
Height:	6.0m	
Blg site %:	43% (276m²)	
Blg & H/S %:	49% (313.6m²)	
Plot Ratio:	0.42 (264.5m²)	
Setback:	Front: 4.5m, Side: 1.2m & 0m	
Garage:	Double garage located at ground level beneath dwelling. Setback 0m from side boundary and 5.85m from main building line.	

Comment:

Planning Scheme Requirements:

No planning permit required. Complies with Building Regulations.

Neighbourhood Character Assessment:

Classic beach house design in terms of its shallow pitched roof, and use of materials. Vegetation along boundaries and in front setback softens and screens building. Small single driveway. Front setback appears larger because of lack of front fencing, and footpath to delineate front property boundary. Unimposing garage set well behind main building line with upper level and balcony constructed over.

	Туре:	Two storey, three split levels
Sec. 14.5 14	Bldg Permit No	. 99/8784
	Land Area:	537m²
Comment of the local division of the local d	Height:	7.1m
	Blg site %:	35% (184m²)
Contraction of the local division of the loc	Blg & H/S %:	41% (217m²)
	Plot Ratio:	0.44 (232m²)
A CONTRACTOR OF THE OWNER OWNER OF THE OWNER	Setback:	Front: 5.5m, Side: 2m & 1.738m
and the second second second	Garage:	Double garage setback 2.4m from side boundary, set 1.9m forward of main building line.

Comment:

Planning Scheme Requirements:

No planning permit required. Complies with Building Regulations.

<u>Neighbourhood Character Assessment:</u> Good articulation and use of recessive colour. Building is largely screened from the street through extensive landscaping with indigenous species. Front setback appears larger because of lack of front fencing, and footpath to delineate front property boundary. Dominant wide concreted driveway and imposing double garage because it is set forward from building and is highlighted through use of a lighter colour.

Multi-Dwelling Developments

Case 11

	Туре:	Two storey, five units
	NCCS:	5.94
	Permit No.	98/7782
	Land Area:	1522m²
	Density:	1/304m²
	Height:	6.8m
	Blg site %:	45.5% (692m² - 138m² p/d)
	Blg & H/S %:	68% (1032m² - 206.4m² p/d)
	Plot Ratio:	0.77 (1173m² - 234.6m² p/d)
	Setback:	Front: 4.5m, Side:Unit 1&2 attached, Units 2,3 &5 attached. Unit 1 is set 1m off side boundary. Unit 2&3 are set 2m apart. Unit 5 is set 2m off side boundary.
	Garage:	Double garage for each unit located at rear of units. Access for all garages is off a single driveway on side street.
Comment:		· , · · · · · · · · · · · ·

Comment:

Planning Scheme Requirements:

Permit issued pre new format planning scheme. Fails to comply with current building site coverage, hard surface site coverage and plot ratio standards of SLO2

Neighbourhood Character Assessment:

Garages and driveway are not visible from main street. Low front fence. Good articulation. However repetitive form and colour, with little setback between dwellings and from side and front boundary. Flat roof. Minimal landscaping to soften appearance of buildings from streetscape.



Comment:

Planning Scheme Requirements:

Fails to comply with building site coverage, hard surface coverage and plot ratio in SLO2. Complies with ResCode. Canopy trees shown on endorsed landscape plan in rear of yard. Not planted.

Neighbourhood Character Assessment:

Good articulation and use of colour, windows and material. No front fencing. Second storey width smaller than ground floor. However, dwellings built side boundary to side boundary, with no screen planting in setback areas to soften appearance of building. Recessive colour of garage door makes it appear further back, however, wide concreted driveway emphasizes width and dominates streetscape.



Туре:	Two storey, two units
NCCS:	5.62
Permit No.	97/7135
Land Area:	674m²
Density:	1/337m²
Height:	6.0m
Blg site %:	32% (215m² - 107.5m² p/d)
Blg & H/S %:	59% (395m² - 197.5m² p/d)
Plot Ratio:	0.54 (362m² - 181m² p/d)
Setback:	Front: 7m, Unit 1: Side: 150mm, 5.1m Unit 2: 150mm, 5.1m
Garage:	Single garage, Unit 1: level with building, unit 2, set forward of main building (Portico projects forward of building by 1.8m)

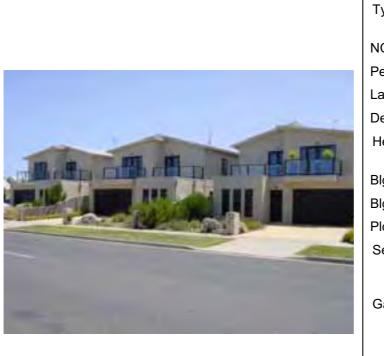
Comment:

Planning Scheme Requirements:

Permit issued pre new format planning scheme. Generally complies with current ResCode and DDO1 standards.

Neighbourhood Character Assessment:

Single garage. Flat roof and unarticulated façade makes dwelling appear boxy – design does not reflect coastal character. Units appear bulky because of the large size of the upper level compared with the ground level. Exotic vegetation and landscape theme. No screen planting from streetscape. Repetitive form for second unit.



Туре:	Two storey, three units - detached
NCCS:	5.12
Permit No.	00/0391
Land Area:	1402m²
Density:	1/467m²
Height:	Unit 1: 7.3m, Unit 2: 7.45m, Unit 3: 7.8m
Blg site %:	37% (519m² - 173m² p/d)
Blg & H/S %:	50% (700m² - 233.3m² p/d)
Plot Ratio:	0.61 (849m² - 283m² p/d)
Setback:	Front: Unit 1: 4.5m, Unit 2: 5.6m, Unit 3: 6.4m. Side: 0m & 1.15m (set off one boundary)
Garage:	Double garage set behind building line. Balcony cantilevered 500mm over garage. Unit 1: 5.7m, Unit 2: : 6.6m, Unit 3: 7.4m

Comment:

Planning Scheme Requirements:

Unit 3 fails to comply with height in DDO1, generally complies with ResCode standards. Landscape plan endorsed with a number of canopy trees in rear yard. Not planted. Constructed dwellings are not consistent with approved plans in terms of external materials – approved external materials included light weight cladding.

Neighbourhood Character Assessment:

Good articulation – balconies break up façade, skillion roof is reflective of old beach house style. No front fencing. However, dominant wide driveway emphasizes wide double garage and paved surfaces. Repetitive use of colour and materials. Lack of landscaping to screen development. Minimal setbacks from front and side boundaries.

between main building and	Type: NCCS: Permit No. Land Area: Density: Height: Blg site %: Blg & H/S %: Plot Ratio: Setback:	Three storey, two units 5.24 91/4759 703m ² 1/351.5m ² 8.2m 28% (196m ² - 98m ² p/d) 45% (317m ² - 158.5m ² p/d) 0.65 (451m ² - 225.5m ² p/d) Front: 4m, Unit 1: Side: 3.3m Unit 2: 3.3m (Both units have carports located
	Blg & H/S %: Plot Ratio:	45% (317m ² - 158.5m ² p/d) 0.65 (451m ² - 225.5m ² p/d) Front: 4m, Unit 1: Side: 3.3m Unit 2: 3.3m (Both units have carports located

Permit issued prior to introduction of new format planning scheme. Fails to comply with current height and plot ratio standards in SLO2

Neighbourhood Character Assessment:

No front fencing. Building design emphasizes height, hence appears tall. Appears dominant and bulky due to small setbacks from front and side boundaries, the lack of screen planting and the large size of the upper level compared with the ground level. Dominant colour scheme.

	Туре:	Two storey, six units	
	NCCS:	4.94	
	Permit No.	00/0625	
	Land Area:	1588m²	
	Density:	1/264m²	
	Height:	6.5m	
	Blg site %:	45% (708m² - 118m² p/d)	
	Blg & H/S %:	71% (1118m² - 186m² p/d)	
	Plot Ratio:	0.70 (1110m² - 185m² p/d)	
	Setback:	Front: Unit 1: 7m (upper level balcony encroaches 1.7m into setback), Unit 6: 5m (upper level balcony encroaches 1m into setback). Side: 1.8m, 2.0m (garages set on boundaries but 15m from front boundary)	
	Garage:	Single garage located to rear of units 1, 2, 5 & 6, and located on rear boundary for units 3	
Comment: Planning Scheme Requirements: Generally complies with ResCode & DDO1 standards. Neighbourhood Character Assessment: Good use of different colour scheme and design to differentiate between units. Roofing is distinctive and picks			

Good use of different colour scheme and design to differentiate between units. Roofing is distinctive and picks up on coastal theme. Garages located to rear of units. However, dominant wide driveway, and high hard surface coverage. Units appear bulky because of size of upper level compared with the ground level. Lack of screen planting. High front fencing. Considered by community to be an overdevelopment of the site.



Two storey, two units
5.59
99/8032
526m²
1/263m²
7.5m
39% (201m² - 100.5m² p/d)
46% (248m² - 124m² p/d)
0.61 (317m² - 158.5m² p/d)
Front: 4.2m, Unit 1: Side: 2.6m Unit 2: 1.9m
Single garages set back from main building line. Unit 1: 5.1m side setback, unit 2, 5.1m front setback

Comment:

Planning Scheme Requirements:

Permit issued prior to new format planning scheme. Generally complies with current standards. Landscape plan provided. Landscaping not carried out.

Neighbourhood Character Assessment:

Single garage. Dark coloured single driveway makes it appear less imposing. No front fencing. Units appear bulky because of size of upper level compared with the ground level. Building lacks articulation and eaves. Repetitive design. Use of brick and tiles gives it a suburban appearance. Small front setback. Lack of screen planting.

	Type: Permit No.	Two storey, three units 02/0023
	Land Area:	1200m²
	Density:	1/400m²
	Height:	8.8m (ventilation shaft projection, bulk of building below 7.5m)
	Blg site %:	37% (435m² - 145m² p/d)
	Blg & H/S %:	69% (824m² - 275m² p/d)
	Plot Ratio:	0.62 (744m² - 248m² p/d)
	Setback:	Front: 5.7m, Side: Unit 1 & 2: 0m and 7.8m Unit 3: 0m & 3.8m
	Garage:	Double garages set back from main building line.

Comment:

Planning Scheme Requirements: Generally complies with standards. Height of shafts exceeds 7.5m. Variation allowed given that bulk of building is at 7.5m, and only ventilation shaft projects to 8.8m

Neighbourhood Character Assessment:

Innovative design with good use of materials. Double garage doesn't appear as dominant due to the use of recessive colours and darker pigment in driveway. However driveway is still wide - high hard surface coverage, with little screen planting. Flat roof makes building appear boxy. Units also appear bulky because of size of upper level compared with the ground level, and small setbacks.

	1	
	Type:	Two storey, four units
	NCCS:	3.79
	Permit No.	01/0377
	Land Area:	1456m²
	Density:	1/364m²
	Height:	7.5m
	Blg site %:	40% (592m² - 148m² p/d)
	Blg & H/S %:	55% (807m² - 201.75m² p/d)
	Plot Ratio:	0.62 (896m² - 224m² p/d)
	Setback:	Front: 6m (front deck encroaches 3.0m into setback), Side: all units: 1.5m, deck built to boundaries.
	Garage:	Carports located to rear of each unit.

Comment:

Planning Scheme Requirements:

Generally complies with ResCode standards and DDO1 standards.

Neighbourhood Character Assessment:

Good use of materials and colours. Design reflective of older beach house (skillion roof). Smaller upper level than lower level reduces visual bulk – good articulation. Upper storey set back from front. Informal driveway due to material (lilydale toppings). Garages / carports not visible from road. Incorporates indigenous vegetation. However, high front fence, and taller screen planting required.



Two storey, two units
02/0593
809m²
1/404m²
7.3m
34% (272m² - 136m² p/d)
50% (405m² - 202.5m² p/d)
0.61 (492m² - 246m² p/d)
Front: 9m, Side: 0m,
Single carport and single garage located to side of each unit, setback3.76m & 6.42m back from main building line

Comment:

Planning Scheme Requirements:

Generally complies with SLO2 standards. Exceeds plot ratio. Complies with ResCode standards

Neighbourhood Character Assessment:

Good articulation and use of colour, windows and material. Large front setback and retention of established Moonah tree softens appearance of building. Indigenous landscaping incorporated in front setback. Low front fence. Single garage and carport set back behind each unit, therefore unimposing, and this reduces the visual impact of the construction of the building from side boundary to side boundary. High plot ratio – the large upper level makes the building look bulkier.

<u>Analysis</u>

It is acknowledged that the selection of case studies is only a 'snap shot' of existing development. Nevertheless it provides a useful analysis of the effect of current planning provisions on neighbourhood character outcomes.

14 of the case studies are covered by the Design and Development Overlay – Schedule 1 (DDO1), whilst the remaining six are covered by the Significant Landscape Overlay – Schedule 2 (SLO2) which includes tighter controls for development. Of the case studies covered by the DDO1, none of the single dwellings required planning permits. However, case study 7 would have required a permit under the current controls because of its height. All the multi-unit development case studies required planning permits.

The following table is an overview of the 20 case studies and their composition in terms of their overall compatibility with neighbourhood character, and their type being either single or multi-dwellings. The table also indicates the source of the photo – it was either used as part of Dr Greens photo rating analysis or was selected by Council officers.

Source of photo & type of development	Compatible / partially compatible	Incompatible
Multi Unit development		
Dr Green's photo analysis	19	11,12,13,14,15,16,17
Council officer	20	18
Dwelling		
Dr Green's photo analysis	6,7	1,2,3,4,5
Council officer	8,9,10	

Of the case studies that required a planning permit and which were considered incompatible with neighbourhood character, seven fail to comply with at least one aspect of the current planning provisions, (noting that four of these permits were issued prior to the new format planning scheme being introduced in October 2000). The most common areas of non-compliance are:

- Five of the case studies (1, 2, 14, 15, & 18) exceed the maximum building height of 7.5m in the SLO2 and DDO1.
- Five of the case studies (1, 2, 11, 12, & 15) exceed the maximum plot ratio of 0.5 in the SLO2.
- Four of the case studies (1, 2, 11, & 12) fail to comply with the maximum building site coverage of 35% and the maximum total hard surface area of 50% in the SLO2.
- Most of these developments have minimal front and side setbacks with negligible landscaping within the setback areas.

While these case studies would have been improved through compliance with the current provisions, such compliance would unlikely have resulted in vastly improved neighbourhood character outcomes. The basis for this conclusion is that at present there is a lack of emphasis provided in the current provisions regarding retention and enhancement of indigenous vegetation. In some of the case studies detailed above, vegetation had been removed to accommodate the development and little if any replacement planting (using suitable species) has been undertaken. In some cases there is inadequate area within the front and side setbacks to accommodate indigenous trees and shrubs that would facilitate screening of the development. It is therefore concluded that the significance of retaining and enhancing indigenous vegetation cover should be the starting point for all developments.

Of the remaining cases where planning permits were issued, it is important to note that case studies 13, 16, & 17 generally comply with the current provisions, even though they are considered to be 'out of character' through the community perception modeling undertaken by Dr. Green. Furthermore, case studies 3, 4, and 5 were also considered incompatible but required no planning permit. These cases were therefore only subject to the requirements under the Building Act.

Case studies 6, 7, 8, 9 &10, all single dwellings, didn't require a planning permit and were rated as being compatible. The point of this distinction between the need for planning approval or not, and the development's compatibility with preferred neighbourhood character, is to highlight that not all buildings which are constructed without the added layer of development approval through the planning system are incompatible with neighbourhood character. However, a significant number are considered incompatible, as is illustrated by the small sample selected here. Hence if planning controls were to selectively target

the elements which are considered incompatible, then most developments which were compatible with character elements could proceed without the need for planning approval.

Also of note is that some case studies which have been through the planning approval process are still incompatible with neighbourhood character, as the controls which are currently in place do not emphasise the importance of the key character elements highlighted within the study. This has resulted in the past in a mixed outcome in terms of developments compatibility with neighbourhood character, despite going through a planning approval process. For example, case study 18 required planning approval, complied generally with current requirements apart from a small section of roof which exceeded the current height limit, and was considered incompatible. Case study 19 also required planning approval, complied with current planning requirements and was considered compatible. Finally, case study 20 required planning approval, and was considered generally compatible apart from the lack of compliance with plot ratio requirements under the SLO2.

Developments which are not subject to the planning approval process are still required to obtain building approval under the Building Act. The requirements under the Building Act are similar to ResCode (Clause 54, & 55 of the Surf Coast Planning Scheme). ResCode is the key decision making tool used in assessing single dwelling and multi-unit dwelling applications in Torquay and Jan Juc within areas affected by the DDO1. Under the ResCode provisions, building site coverage can be up to 60%, and a minimum of 20% permeable surfaces must be left over. Based on the case studies assessed against ResCode, and those assessed under the Building Act, even though they are generally not developed to the maximum intensity that is possible under the current provisions, the developments are considered to be inappropriate for the character of Torquay and Jan Juc. The key issue with most developments is the ability, or lack thereof, to retain and enhance the vegetation cover.

To facilitate enhanced vegetation cover, the building siting, site coverage, permeable surfaces and plot ratio provisions need to be revisited to ensure that there will be adequate area for vegetation. As evidenced by the case studies illustrated here, the current provisions are inadequate in this regard.

The following table examines various development characteristics for the case studies which were considered incompatible with the preferred neighbourhood character.

Average area per dwelling in m²	Multi-unit development - Incompatible	Single dwelling - Incompatible
Site area	345m ²	653m²
Building site coverage	128m² or 38%	215.2m² or 35%
Hard surface coverage (incl. building site coverage)	201m² or 59%	347m² or 55%
Total floor area per dwelling (plot ratio)	221m² (0.65)	287m² (0.48)

Site Coverage and hard surface coverage

Using the information from the above table and the case studies more generally, it is possible to begin to determine minimum requirements for future development. Precise figures should be established as part of the planning scheme amendment process.

The average area of 41% of the site for permeable surfaces in multi unit developments and 45% in single dwelling developments did not result in compatible developments. This area, as discussed above, is considered inadequate to retain or enhance the vegetated character of Torquay and Jan Juc. Increasing the minimum area of permeable surfaces to provide for additional area for landscaping, whilst at the same time not being unreasonable in terms of allowing future development, will be necessary. This should not include common property or driveways given that the purpose of permeable surfaces is to provide for an area to be landscaped. This is opposed to pervious surfaces as defined within ResCode which deals with the ability of a surface to be able to absorb water. Driveways cannot be landscaped and can therefore not contribute their area towards the vegetated character of a development. They should therefore be excluded from any calculation of hard surface.

Similarly, the calculation for areas for multi-unit development and subdivision should ensure that the relevant development standards are met for each dwelling, and are not averaged across dwellings. This

is necessary, as is evident from case study 1, to ensure that developments which comply with provisions at the time of construction and which are later subject to subdivision proposals are still compliant with development standards.

Hard surface area includes building site coverage and hard surfaces such as paving and driveways. It is important to define a maximum building site coverage to accommodate enough space for hard surfaces. Consistent with the definition of a building as defined in s. 3 of the Planning and Environment Act (1987), a building includes:

- "(a) a structure and part of a building or a structure; and
- (b) fences, walls, out-buildings, service installations and other appurtenances of a building..."

Based on the above definition, decking, even at ground level, is considered part of a building, and should be calculated as part of building site coverage. There should be an adequate allowance for an area of the site to be developed by driveways and other paved areas. As such, the maximum building site coverage should be proportionately below the maximum hard surface area. Although a prescriptive approach is recommended, there should be room for discretion to be exercised in each case by relating the outcome to the landscape character objectives in the overlay. Hence, there may be some room to vary the overall building site coverage, if this does not impact on the maximum hard surface area, and landscaping outcomes. It is also suggested that one of these objectives emphasises the siting of buildings to allow enough room around the development to adequately screen the building using vegetation.

Plot Ratio

Large, bulky, dominating housing is considered incompatible with the preferred character. Restricting the gross floor area permitted on a site (plot ratio) is an effective means to limit the upper floor area, which has a greater impact on building bulk. As with site coverage it is recommended to introduce plot ratio controls to reduce the visual bulk of buildings by controlling the size of upper storeys. Percentages should be arrived at by studying the case studies to determine the impact of different building sizes on different sized allotments.

Front and side setbacks

In each of the above case studies, buildings with little separation from one another and from property boundaries, tend to result in a dominant built form in the landscape, with little capacity for integration into the surrounding vegetated environment, or re-establishment of vegetation. Narrow setbacks do not provide adequate area to establish planting of new indigenous trees that are characteristic of the preferred character due to their proximity to buildings. Setback controls should be introduced to ensure there is adequate space around buildings to plant shrubs and trees. Setback areas should be arrived at by using templates of different vegetation types to ensure that adequate area is available on a site for the planting of indigenous canopy trees and shrubs following development of a dwelling.

Garage

It is also noted from the case studies the importance of the positioning of the garage and the width of driveways on the appearance of the dwelling and its compatibility with the preferred character. Case 10 is a case in point. The bulk of the dwelling is extensively screened from the street. However a double garage and wide light coloured driveway dominates the building's appearance from the street. Garages which are located well behind the main building line and which are serviced by narrow driveways, particularly those with recessive colour schemes and partially permeable surfaces, are more compatible with the preferred character. As such, controls should be introduced to address this issue.

Appendix 1

Copy of "A Study of Resident Perceptions of Neighbourhood Character: Torquay/Jan Juc" (Dr Ray Green, 2003)

A Study of Resident Perceptions of Neighbourhood Character: Torquay and Jan Juc

Dr. Ray Green

Faculty of Architecture Building and Planning, The University of Melbourne Parkville, Victoria, Australia

September 2003

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Executive Summary

This study examined the way residents of the town of Torquay and the associated settlement of Jan Juc perceive and evaluate the contribution of existing built and natural features to neighbourhood character. Initially, a range of local environmental features, considered by residents to contribute to neighbourhood character, (or to detract from local character), were identified through a projective mapping mail questionnaire (N = 293). Those features most frequently mentioned in the mail questionnaire were then photographed and presented in a PowerPoint presentation to members of the community at a community workshop (N = 34). Workshop participants were asked to rate each of the features, as depicted in the photographs, in reference to neighbourhood character compatibility. A variety of feature types, including a range of natural features and built developments, were assessed in this photo rating exercise. Finally, two focus groups were held; one during the community workshop and one with a community reference group composed of local residents from the various neighbourhoods. The first focus group was aimed at identifying various aspects of neighbourhood character that could not necessarily be photographed and in the second one to help in interpreting the results of the photo rating exercise.

The results indicate that features perceived to contribute to neighbourhood character, and likewise those features that were rated as detracting from local character, share similar physical attributes. In this respect developments perceived to be most compatible with neighbourhood character are those that have adequate landscaping, particularly incorporating mature, indigenous trees and other forms of indigenous vegetation, are in colours that appear to recede, thus reducing the prominence of the building from the street, or are in colours that are reflective of the area. Houses built with natural materials such as stone, weatherboard and other types of timber that look natural, lightweight and/or are reflective of the area were also frequently associated with developments rated compatible with neighbourhood character. Smaller developments with larger setbacks and smaller footprints are also perceived to be more compatible with local character than are larger (in mass and height) developments with smaller setbacks. A sense of nostalgia, associated with the history of Torquay and older style beach houses and other classic 'Australian' style houses was also identified as an important attribute associated with developments that were rated as compatible with neighbourhood character. Many of the older beach style houses have roofs that are shallow pitched (skillion type design), reflective of old beach shacks, although houses with gables and other types of peaked roof designs were also associated with some developments rated compatible with neighbourhood character. Such older houses were typically described as humble and understated in design. However, some contemporary developments that have unique, interesting and innovative designs were also perceived to be compatible with local character. Architectural forms and designs described as balanced and moderately complex in terms of form and colour, often associated with well articulated walls and the front facades of houses, were associated with developments rated as compatible with neighbourhood character. Buildings that do not have fences in either their front yards are also seen as more compatible with neighbourhood character than those with fences, particularly large fences that are considered to be obtrusive and of designs that are unsympathetic to the house and surrounding area. In addition, houses with single, smaller driveways, particularly those paved in gravel or other natural materials, are seen to be more compatible with local character than those with larger or double driveways paved in concrete or other visually dominate materials.

In contrast, developments perceived to be the most incompatible with neighbourhood character are those that lack adequate landscaping, particularly those lacking mature trees and indigenous vegetation, or developments where indigenous vegetation has been cleared from the site during construction. However, those houses that present overly manicured gardens and lawns were also associated with developments that were rated as incompatible with local character. Developments perceived to be too big, and hence out of scale and dominating their surroundings, were likewise also rated as incompatible with neighbourhood character. This includes houses that are too tall, specifically three storey buildings, and/or those on lots perceived to be too small for the size of the

house. Houses that display a repetition and uniformity of architectural forms, or that have forms and designs perceived to be either too complex or too stark and boring, were also rated as incompatible with local character. Such development was often negatively described as being "suburban" or "urban" looking. Certain materials such as brick veneer were sometimes associated with such "suburban" and "urban" looking development. Developments in this category were also frequently described as being boxy and too bulking looking. Houses with minimal front, side and/or back setbacks were also associated with incompatible developments. Many such developments were also perceived to cover a high proportion of their lots making these developments look too dense. Houses that have high, solid, unarticulated front fences or walls were also rated as incompatible with local character. Likewise, those developments that have visually dominate concrete or asphalt driveways, or visually dominant garages, were rated as such. Strongly contrasting and harsh colours were also associated with developments rated as being out of character. Houses that have flat roofs or that lacked eaves and/or that have roofs that are visible above the tree canopy were, in some instances, rated as incompatible with local character. A couple of houses that were identified as being out of character were described as "Queensland style" houses and not reflective of the local area.

The results of this study provide useful information in respect to how members of the local community conceptualise neighbourhood character. The findings suggest that various planning mechanisms and controls could be developed and implemented to encourage new development that will possess attributes associated with high character compatibility and discourage development with attributes related to low character compatibility. The results of this research can also be used to help predict how new development may be evaluated by the community in terms of neighbourhood character compatibility. When combined with results of the inventory of the physical characteristics of the various neighbourhoods (reported elsewhere) a comprehensive assessment of how neighbourhood character is manifest in the town can be obtained. From this understanding appropriate planning controls and environmental management strategies can be developed with the aim of maintaining and enhancing positive aspects of neighbourhood character, and establishing and guiding the design of new character, while at the same time discouraging negative impacts on existing valued neighbourhood character.

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Introduction

Australian coastal towns located near major metropolitan areas, such as Torquay/Jan Juc, are increasingly under pressure from residential and commercial development. In such places it is common to hear local residents complain that the "character" of their town or neighbourhood is being degraded or lost due to inappropriate development and other environmental changes associated with town growth. Often local communities oppose any new development on the grounds that it may negatively alter or destroy valued town and neighbourhood character. Local planning authorities are attempting to respond to such public concerns by devising strategies for controlling development and growth with the aim of maintaining a positive expression of local character over time.

State planning policy in Victoria has recently mandated, though the introduction of *Rescode*, that local governments must now consider neighbourhood character when revising their planning schemes. In response to this mandate many shire councils are in the process of undertaking neighbourhood character studies to identify environmental features thought to be important in conveying local character. Generally town planning, landscape architectural or urban design professionals are engaged to undertake these studies. These consultants use their expert judgement to define what they believe constitutes the character of a town or neighbourhood and to identify the environmental features, and associated attributes, they consider to be most important to the character of specified areas, such as neighbourhoods. Subsequent to carrying out such studies various planning mechanisms and controls may be incorporated into local planning schemes to try and maintain and enhance town and neighbourhood character. The idea is that if key elements of town and neighbourhood character can be identified it may be possible to propose ways in which towns can allow, and even welcome, growth while shaping it to maintain positive expressions of neighbourhood and town character.

Typically, the professionals engaged to conduct town and neighbourhood character studies will often ignore the perceptual and experiential responses of local residents to the features they identify as being salient to neighbourhood and town character. Instead these professionals rely on their expert judgement to determine what are, and what are not, the features of a town or neighbourhoods that are important in conveying character, and thus worthy of conservation and/or special management. Yet the assumption that professional, expert judgements are necessarily congruent with community environmental perceptions and values has been challenged by the findings of several landscape and architectural perception studies (Devlin and Nasar, 1989; Hershberger, 1988; Kaplan, 1983; Pennartz and Elinga, 1990; Uzzell and Leward, 1990). These studies cast doubt on the validity of basing town and neighbourhood character assessment solely on expert standards and suggest the need for perceptually based procedures that directly involve local communities in such assessments to complement purely expert based physical inventories of likely character defining features. The research described in this report assumes that residents, because they are most familiar with their local environments, will be more likely to possess an indepth understanding of the character of their neighbourhoods, and associated features, than are outside professionals. Sometimes residents may also develop strong emotional attachments to features that are important to local character and one would not necessarily expect outside professionals to understand these emotional connections. Thus, it is maintained that understanding the perceptions and values associated with town and neighbourhood character, as held by members of local communities, is particularly important in terms of obtaining valid town and neighbourhood character assessments.

Currently a series of studies are being undertaken by various consultants to help the Surf Coast Shire Council planners better understand the character of neighbourhoods in Torquay and the nearby settlement of Jan Juc. These studies include a physical survey of the elements that may define the character of different neighbourhoods (undertaken by Bev Martin), a botanical study to document and evaluate various plant communities in the town (Trengove, 2003) and the neighbourhood character perception study as presented in this report which is aimed at understanding the perception of neighbourhood character from the perspective of the local community. Collectively results of these various studies will allow Council planners to assess the effectiveness of the current planning scheme, and associated development controls and environmental protection measures, in terms of managing neighbourhood character, and will assist them in revising the existing planning scheme if this is deemed necessary.

The primary aim of the study reported here was to define neighbourhood character in terms of what people in the community think and feel about the character of their individual neighbourhoods. To this end the author, Dr. Ray Green of the Faculty of Architecture Building and Planning at The University of Melbourne, undertook a study of community perceptions of neighbourhood character in Torquay and Jan Juc as part of a larger project he is conducting that is exploring these issues in several towns along the Great Ocean Road. The study, as reported here, focused on defining town and neighbourhood character through assessment of community environmental perceptions using a research methodology developed over several years by Dr. Green for this purpose (for details on past studies see - Green, 1985, 1995, 1998, 1999, 2000a, 2000b, 2002).

Study Aims and Research Questions

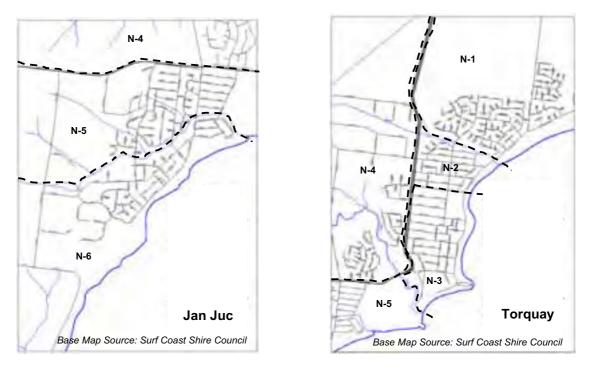
The aim of this study was to understand how people living in Torquay and Jan Juc conceptualise "neighbourhood character" and to identify the biophysical features and attributes associated with positive responses to neighbourhood character and those features and attributes associated with negative responses. In this way what people think and feel about existing local character and about perceived loss of character within this context was documented. Specifically, the research explored the following questions:

- How do members of the local community define the character of their neighbourhood (s)?
- How do residents conceptualise the geographic extend of their neighbourhood areas?
- What are the environmental features within neighbourhood precincts considered by residents to be important in conveying neighbourhood character?
- What are the environmental features within neighbourhood precincts considered by residents to negatively detract from neighbourhood character?
- How do residents evaluate these character features (both those that detract and those that are important to neighbourhood character) in terms of perceived character compatibility?

In addressing these questions the study looked at components of town and neighbourhood character with an emphasis on the built form because it is primarily through control of new development that the local planners have the greatest control. The most important action planners can take in terms of natural environmental features, which in this study were found to be integral to defining town and neighbourhood character, is through protecting and conserving these features and views of these features from potential negative impacts resulting from development.

Study Area

The geographic areas addressed in this study are only those under Council planning justification within the town boundaries of Torquay and Jan Juc as expressed in the Municipal Planning Scheme. Through analysis of the projective mapping data, as will be discussed; six neighbourhood precinct areas were identified within the study area. The size of these neighbourhood precincts assured that each neighbourhood area would have a sufficient number of respondents to allow statistical aggregation of the data within neighbourhoods to meet methodological requirements. However, these precincts may be subsequently reconfigured into smaller (or larger) areas as a result of the physical characteristics survey being undertaken separately and to meet planning requirements. The study area, including definition of the six neighbourhood precincts and their boundaries, are illustrated in Figure 1.



Note: N1 to N6 designate neighbourhood precincts and dashed lines indicate precinct boundaries

Figure 1: Study Area Maps with Neighbourhood Precincts

Methods

As mentioned, the methodology used in conducting this study has been developed, tested and refined by the author over several years and has proven both reliable and extremely sensitive in describing and assessing community perceptions of town and neighbourhood character. The results obtained from this methodological approach have proven capable of providing useful information for planning purposes. Specifically, methods used to delineate neighbourhood precinct boundaries, to identify stimuli elements (neighbourhood and town features identified by the community to be salient to local character), assess these features in respect to "neighbourhood and town character compatibility", and for involving the community in interpreting the results, were employed in this study. This multi-stage research design initially incorporates a mail projective mapping survey, followed by a photo rating exercise and finally focus group discussions to help interpret the results. These methods were applied sequentially to identify a range of local environmental features and places residents' associate with the character of their neighbourhoods, measure the perceived degree of "character compatibility" of these features and interpret the results from the perspective of local residents.

Projective Mapping Mail Survey

Initially, a "Neighbourhood Character Questionnaire" was formulated and mailed to all 5756 ratepayers of Torquay and Jan Juc. The primary aim of this projective mapping questionnaire was to help identify those features of the town considered to be most important in conveying neighbourhood character, and likewise those features seen to be detracting of local character, so that these features could then be photographed in the field and used in a subsequent phase of the study (photo rating exercise). The questionnaire was aimed at understanding:

• What geographic areas people think constitute their local neighbourhood and the reasons for this understanding.

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- The features people believe to be most compatible with the character of their neighbourhood.
- The features people believe to be most incompatible with the character of their neighbourhood.

The questionnaire consisted of two sets of two A3 format maps (one set for Torquay and one set for Jan Juc) with instructions requesting respondents to indicate, on one of the maps, (the one representing the area where they live), where they would take a set of photographs to illustrate the features and places they considered to be most important in positively contributing to the character of their neighbourhood, and on the other map, where they would take a set of photographs to illustrate those features/places they considered to be most incompatible with neighbourhood character. Respondents were also asked to describe what features they would include in their photographs and the vantage points from which they would take them.

In addition, respondents were instructed to draw a line on the map to indicate the boundary of the area they consider to represent their neighbourhood, state why they felt this area to be their neighbourhood and to indicate with an X where their house was located. Analysis of this data consisted of overlaying all the individual neighbourhood boundaries on a composite map and identifying a limited number of shared neighbourhood precincts from the patterns that emerged. From this analysis six neighbourhoods to six was, as previously mentioned, to allow the data collected from subsequent methods to be aggregated by precinct.

Out of the 5756 questionnaires that were delivered, 293 useable questionnaires were returned resulting in a 5% overall response rate. Although this is a fairly typically response rate for such mail questionnaires, it cannot be assumed to be a representative sample of the community due to the possibility of non-response bias. This means that those who responded, and those who did not response, to the questionnaire, may be systematically different from one another in some respect. However, the demographic composition of those who responded does reflect reasonably well the actual demographics of the community (in regard to those demographic questions that were asked in the questionnaire - see Appendix A for details). One of the notable exceptions to this demographic fit was the fact that the respondent group included very few young people. Typically older people and people with higher levels of education are more likely to respond to such mail surveys than do younger people and those with lower levels of education. Level of education was not asked in the questionnaire so this variable could not be assessed. For the purposes of this study, to identify a range of environmental features associated with neighbourhood character for use in a subsequent data collection procedure (photo rating exercise), and due to the reasonably high degree of consensus observed in the features identified within neighbourhoods, data generated from the guestionnaire was considered suitably reliable for the purposes of this study.

Photographic Inventory

Based on results of the projective mapping questionnaire, a set of photographs of the most frequently mentioned features in each neighbourhood precinct were taken. Over 400 hundred photographs were taken, from which 84 depicting a robust range of features, places and environmental characteristics, with an emphasis on built features, were selected for use as stimuli in the photo rating exercise. These were the neighbourhood features most frequently cited in the projective maps (see Appendix C). These photographic images, depicting a range of town and neighbourhood features, were scanned and incorporated into a PowerPoint presentation for use as stimuli in a community photo rating exercise. The aim of the photo rating procedure was to collect quantitative data on the perceived "character compatibility" of the depicted features/places in respect to the different neighbourhood precincts. Past research has found that photographs used in this way generally elicit very similar responses to those obtained *in situ*, particularly if the respondents have a degree of cognitive familiarity with the depicted environments (Craik, 1972a; Daniel and Boster, 1976; Hershberger and Cass, 1974; Nasar, 1988, Shafer and Richards, 1974; Shuttleworth, 1980; Stamps, 1990; Stewart *et al.*, 1984). Past research by the author has

confirmed the utility and reliability of using photographs as surrogates for actual on site environmental assessments in town character assessment research (Green, 1985, 1999, 2000a). Colour photographic slides have proven to be the most valid in this respect (Daniel and Boster, 1976), however, in this study colour photographic prints were originally taken and then digitally scanned and incorporated into a Powerpoint presentation for use in the photo rating exercise, which was assumed to approximate the use of colours slides.

Community Workshop

A community workshop was held in Torquay/Jan Juc in March 2003. The workshop was divided into two parts beginning with a photo rating exercise, in which the participants rated the 84 neighbourhood character features as depicted in the photos as displayed in a PowerPoint presentation. This was followed by focus group discussions concentrating on various aspects of neighbourhood character in which participants were grouped according to the neighbourhood precinct in which they lived.

In the mail questionnaire respondents were asked to indicate if they would be willing to participate in future exercises associated with the neighbourhood character study. Of the 293 questionnaires returned 156 (53%) indicated they would be willing to participate in future activities associated with the study. These people were sent invitations to the community workshop. Of the 34 people who participated in the community workshop, 17 were females and 15 males (two did not answer this question). Twenty-four participants lived full time in Torquay/Jan Juc while eight lived full-time elsewhere and two people did not answer this question. Respondents were of various ages with the most (11) in the 41-50 year old category, followed by the 31-40 category (7) and the 51-60 category (6), with the remainder spread across the other age groups. Twenty-four of the respondents grew up in a large or regional city while nine had a rural or small town background with one person not responding to this question. The entire six neighbourhood precincts were represented, however, this distribution was unequal with Neighbourhoods One, Two, Three and Five having the most respondents while Neighbourhoods Four and Six had less representation (see Appendix B for details of the sample group).

Photo Rating Exercise

At the community workshop participants were shown the stimuli photographs, in random order, via the PowerPoint presentation, and asked to rate each feature/place (as depicted in the photos) in terms of perceived neighbourhood character compatibility. Participants were first shown the 84 photos of the depicted neighbourhood features and asked to record their judgement responses for each photo on a preformatted response-recording booklet. The participants were asked to rate each depicted feature/environment on a seven point, bi-polar rating scale intended to measure degree of perceived "neighbourhood character compatibility" Three additional rating scales were included to assess qualities found in past research to be strongly associated with perceived character in similar small coastal towns; perceived beauty, distinctiveness and naturalness (Green, 1999, 2000b). The slides were initially briefly shown to allow respondents to view the entire photo set then they were shown each photo again for 30 seconds, resulting in approximately 45 minutes of photo rating during the workshop.

Focus Groups

There were two focus groups held during the course of the study, one during the community workshop and one in August (2003) involving a community reference group that had been established to provide feedback during the study. The community reference group was comprised of 12 people who lived in the various neighbourhoods of the town.

As mentioned, Focus Group One formed part of the community workshop and involved dividing the 34 participants into six groups according to the neighbourhood in which their houses were located. Each group was assigned a facilitator and was asked to respond to three questions:

• What features of the precinct in which you live positively contribute to its character?

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- What features of the precinct in which you live detract from its character?
- How would you like to see the precinct develop into the future? What is the preferred character?

Results of this exercise are presented in Appendix D.

Focus Group Two involved the community reference group members looking at the stimuli photos, arranged by neighbourhood precinct in order of how they were rated in terms of character compatibility at the workshop – from most to least compatible with local character. In order to help interpret the results participants were asked to give reasons why they thought developments depicted in the photos had been rated the way they were in the photo rating exercise. Specifically, participants were asked to identify attributes of the stimuli features they thought might have contributed to the ratings. Data from this focus group were content analysed and is presented in table form in Appendix E.

Data Analysis

Projective Mapping Questionnaire

The projective mapping questionnaires where analysed to identify the features most frequently mentioned in relation to contributing to, or detracting from, neighbourhood character, and to identify locations where these features could be photographed. Analysis of the questionnaires consisted of tallying the frequency of mention of both specific and more general types of features and then plotting where these features occur geographically in each of the six neighbourhoods. The features most frequently mentioned were categorised into positive and negative elements and grouped by:

- Views
- Development
- Natural Features / Open Space
- Vegetation
- Access
- Activities
- Other types of features that did not fit into the above categories.

The frequency which features were mentioned was recorded on tables by neighbourhood precinct and according to if they were considered to contribute positively or negatively to neighbourhood character (see Appendix C). Features and associated photographic vantage points were then plotted on composite neighbourhood maps for use in conducting field photography.

Analysis of data from the survey question that asked people to draw a line around their neighbourhood was analysed by overlapping all the maps on transparent overlays and determining patterns that suggested consensus in defining neighbourhood boundaries. While few people indicated the exact same neighbourhood configurations there were obvious broad patterns that suggested six general neighbourhood precincts as illustrated in Figure 1.

Photo Rating Exercise

Analysis of the photo rating data (from the photo rating exercise) consisted of generating simple mean and standard deviation values aggregated across all respondents for each photograph (depicted feature/place) (see Appendix G for all photos along with their associated character compatibility rating values). The photo rating data, and associated photographs, were separated into each of the six neighbourhood precincts and combined with open-ended response data from Focus Group Two. These photo/rating tables (Appendix E) reflect how the community reference group interpreted the photo rating results from the workshop. Due to the fact that the character compatibility ratings generally were highly correlated with ratings of beauty, distinctiveness and naturalness, only the character compatibility ratings are presented here.

Focus Groups

Finally, open-ended data collected from the community workshop focus groups (Focus Group One) and the community reference group focus group (Focus Group Two) were content analysed. Analysis of Focus Group One data identified a series of issues and concerns in reference to each of the six neighbourhood precincts (see Appendix D). Focus Group Two data were categorised by perceived positive or negative contribution to neighbourhood character by photo and organised by neighbourhood precinct (Appendix F). Open-ended data derived from Focus Group Two was content analysed by tallying individual comments to derive frequency of mention sums by photos. The results were then combined with each photograph's rating values (means and standard deviations) by neighbourhood precinct as illustrated in Appendix E. For example, the development depicted in the highest rated photo in Neighbourhood One was suggested by reference group members to have been rated as such due to its warm earthy colours, indigenous landscaping, large front setback, the fact it was partially screened from the road by vegetation, its curved roof lines and its light and airy appearance.

Results

Analysis of open-ended data from the mail questionnaire, data obtained from the photographic rating exercise and the two focus groups yielded a wealth of useful information about how local residents conceptualise, and evaluate, the general character of their town and neighbourhoods. These results are summarised below.

Features Rated Most Compatible with Neighbourhood Character

Because the photo rating data was collected using a seven point "neighbourhood character compatibility" scale any rating from 1 to 4 indicates perceived compatibility with neighbourhood character to some degree, from strongly (1) to slightly (3.9), while any rating in the range of 4 to 7 represents some degree of perceived incompatibility with neighbourhood character, from slightly(4.1) to strongly (7) incompatible.

The features that were rating as being strongly compatible with neighbourhood character (Means from 1.00 to 1.97) were all associated with natural environments including beaches (Photos 7, 14, 17, 50, 67), access to, and walking tracks through, vegetated natural open space areas (Photos 2, 19, 23, 26, 43 and 48), bodies of freshwater including creeks and ponds (Photos 2, 19, 23, 26, 43, 48) and historic buildings (Photos 25, 28, 41). This finding suggests that these features are perceived to be the most compatible with the character of Torquay and Jan Juc. For example, the scene rated the most compatible with neighbourhood character (Mean = 1.00, S.D. = 0.00) was the main beach in Torquay (Photo 7 - Figure 2). The historic house depicted in Photo 25 (Figure 3) was the highest rated built feature (Mean = 1.32, S.D. = 0.59) suggesting it, like the other historic features that received similarly high ratings, is also strongly associated with neighbourhood character. Other houses rated as particularly compatible with neighbourhood character include those depicted in Photos 1, 11 and 28. In addition to the fact that most of these houses are small, older structures they were all associated with significant vegetation. For example, the house depicted in Photo 25 has magnificent mature Moonah Trees (Melaleuca lanceolata) lining its front path while the houses depicted in Photos 1 and 28 both have large mature trees in their gardens. The house depicted in Photo 11 (Figure 4) is located in Jan Juc in neighbourhood Six and is a single storey structure set in Coastal Heath vegetation. This house is constructed of natural, weathered looking timber, is just barely visible above the top of the Heath vegetation and no other development is nearby. No doubt these attributes assist in making this house perceived to be highly compatible with neighbourhood character.



Figure 2: Main Beach at Torquay in Neighbourhood Three

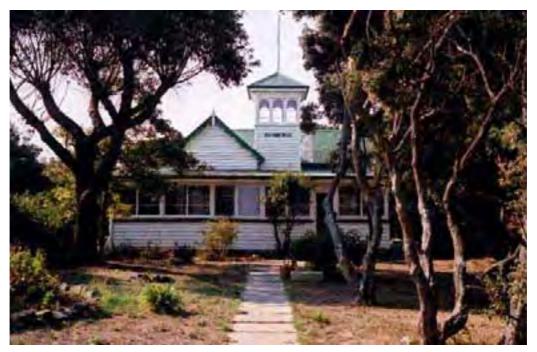


Figure 3: Historic House in Neighbourhood Three with Mature Vegetation

A pastoral landscape depicted in Photo 30 was also a highly rated scene (Mean = 1.71, S.D = 1.10). It is interesting that this land is very representative of the type of land that is currently being subdivided to build many of the newer housing estates in Torquay. The transforation in perceived town character is dramatically illustrated when this photo is contrasted with Photo 27 that depicts the Great Ocean View Estate, which was rated as highly incompatible with local character (Mean = 5.74, S.D. = 1.62). The Great Ocean View Estate is sited on land that was until recently agricultural land similar to that shown in Photo 30 (Figure 5).



Figure 4: House in Heathlands in Neighbourhood Six



Photo 30 (Mean = 1.71, S.D = 1.10)



Photo 27 (Mean = 5.74, S.D = 1.62)

Figure 5: Contrast Between Agricultural Land and Recently Subdivided Agricultural Land Used for Residential Development.



Figure 6: Classic Beach Style House in Neighbourhood Six

Features Rated Moderately Compatible with Neighbourhood Character

Many of the houses that were rated as moderately compatible with neighbourhood character (Means 2.29 to 3.00) are small, older, "beach style" houses constructed of timber or "fibro". For example, the house depicted in Photo 8 was described in both the mail questionnaire and in focus group discussions as a classic Jan Juc beach style house (Figure 6). Positive attributes associated with this house, and others like it that were similarly rated as being moderately compatible with neighbourhood character (Photos 3, 8, 29, 47, 49, 61, 63, 72 and 78), is the fact it is nestled in mature trees, is lightweight in appearance and its colour is in keeping with the style and architecture of the place at the time it was built. Many of these beach style houses also have a characteristic shallow pitched "skillion" type roof design.

These, and other houses that were rated as moderately compatible with neighbourhood character, all share the similar attributes of being smaller rather than larger (generally single storey), painted in subdued colours (suggested to be reflective of the area), built of timber or "fibro" materials and in many instances nestled into mature vegetation and/or have mature vegetation in their gardens. Focus group participants also described these houses as providing a nostalgic connection with the past and in some instances as being "endearingly rundown".

There was only one newer house in this group that was rated as moderately compatible with neighbourhood character (Photo 78, Mean = 2.71, S.D. = 1.40). Despite the fact that this house is three storey it is constructed of timber that has a rustic, weathered appearance, is nestled into mature indigenous vegetation and has an unsealed, gravel driveway (Figure 7).



Figure 7: Newer House Rated as Moderately Compatible With Neighbourhood Character

Features Rated Slightly Compatible with Neighbourhood Character

Four contemporary houses (Photos 46, 56, 57 and 70) received ratings suggesting they are perceived to be only slightly compatible with town character (Means from 3.29 to 3.79). However, it must be appreciated that very few contemporary houses were rated as being in character to any degree so it is important to understand what it is about these houses that cause them to elicit such responses. In the focus group discussions both positive and negative attributes were associated with these houses. Attributes thought to contribute to their character compatibility include their relatively small scale and footprints, roof designs, which includes peaked, curved and slanted plane forms, colours, their sometimes interesting architectural designs including in some instances well articulated surface treatments. Attributes suggested to contribute to their incompatibility with neighbourhood character include their minimal setbacks, which contributes to a sense of crowding, lack of sufficient landscaping, fencing and concrete driveways and lawns giving some of them a "suburban" appearance.

Features Rated Slightly to Moderately Incompatible with Neighbourhood Character

Developments rated as only slightly detracting from neighbourhood character include nineteen contemporary houses that received mean ratings from 4.06 to 4.94. There were also a couple of commercial areas and buildings, such as the car wash and the back of the shops in Torquay's town centre, and a couple of older houses that were also rated as slight to moderately incompatible with local character. The focus group participants suggested that the more contemporary developments in this group share several common attributes that might explain why they were rated as incompatible with local character which include their boxy appearance, bulk and large scale (in terms of both mass and height), giving some of them an "unfriendly" appearance, lack of surface articulation and repetitive forms, solid fences and walls, minimal front and side setbacks, insufficient landscaping, inappropriate colours and large and dominating garages. The development depicted in Figure 8 (Photo 13) embodies many of the attributes associated with houses that were rated incompatible with local character including having visually dominating driveways, fencing, repetitive forms, lack of landscaping and painted in bright obtrusive colours. Some of the developments in this group were suggested to have attributes that made them

somewhat compatible with local character including, in some instances, their colours, interesting and innovative architectural and roof designs and use of indigenous plants in the landscape.



Figure 8: House in Neighbourhood One Rated as Moderately Incompatible with Neighbourhood Character

Features Rated Moderately to Strongly Incompatible with Neighbourhood Character

Developments that were rated as moderately to strongly incompatible with neighbourhood character include several contemporary houses and units that received mean ratings ranging from 5.03 to 6.00. Suggestions given in focus group discussions as to why these developments received such poor ratings include their boxy, repetitive and uniform architectural designs, lack of surface articulation, bulk and size (too large in terms of both height, e.g. three-storey, and mass), minimal front and side setbacks, small size of lots compared to size of buildings (high site coverage), lack of landscaping or landscapes dominated by highly manicured exotic plants, flat roofs with no eaves and colours that are too bright, garish or highly contrasting. Many of these developments were described as being too "urban" or "suburban" in appearance, or representative of styles transported from elsewhere and thus not sympathetic with the area's character. The feature that was rated the most incompatible with neighbourhood character (Mean = 6.00, S.D. = 1.30) is a highly visible bright yellow sign painted on the side of a building in Neighbourhood Three (Figure 9). The fact that many of the features in this category, such as the signage depicted in Figure 9 and a view of the Great Ocean View Estate as depicted in Figure 5, are highly visible from popular open space areas and transportation routes and was frequently mentioned in the mail questionnaire as one important factor contributing to their low character compatibility.



Figure 9: Highly Visible Signage and Building Colours as Viewed from the Esplanade

Perceived Differences in Character Across Neighbourhoods

While there were strong similarities across neighbourhoods in terms of the types of features identified as contributing to neighbourhood character, as well as those detracting from local character, (and in terms of their associated physical attributes), there were also some differences noted. These differences can be discerned by examining the photos and associated focus group comments as presented in Appendix E. For example, Neighbourhoods One and Four contain large, and relatively dense housing estate developments located on subdivided land that was until recently agricultural land. Neighbourhood Three and along the Great Ocean Road in Neighbourhood Four contain most of the commercial development in the town, hence differentiating certain parts of these neighbourhoods from other areas which are more residential in character. Neighbourhood Three also contains most of the remaining historic buildings while Neighbourhood Two and Jan Juc contain many of the older beach style houses associated with the area's past. Jan Juc also has considerable areas of Heathland vegetation. Despite these differences the same attributes that make some developments perceived to be detracting from neighbourhood character, and other developments supportive of neighbourhood character, are generally common across all neighbourhoods. However, it must be recognised that the study reported here examined only a limited number of specific features and their perceived character compatibility at specific locations within the different neighbourhood precincts. As such the findings of this study of community perceptions of neighbourhood character should be read in conjunction with both the findings of the physical survey of biophysical characteristics of the various neighbourhoods (reported elsewhere) and the ecological and vegetation assessment report prepared by Mark Trengove (2003) to fully understand the homogeneity of types of features, and their associated attributes, in defining discrete neighbourhoods across the study area.

Conclusions

What the findings of this study suggest is that natural environments and associated natural features, and views of such features, specifically the beach, creeks and ponds, open space areas such as the golf course and nature reserves, and the few remaining historic built features, are vitally important to the character of Torquay and Jan Juc. These features need to be conserved if the framework of the town's character is to be retained in the face of continuing development

pressure. Any development that results in disturbance to these features should be discouraged through appropriate planning controls.

A range of contemporary houses was tested in this study; some off which were rated as compatible with local character (Figure 7) while others were perceived to be highly incompatible with local character (Figures 11 and 12). Developments that were found to be highly compatible with existing neighbourhood character can serve as models to guide the creative design of future development. Likewise those developments that were rated as incompatible with local character can serve as reminders of what to avoid and discourage in new development (Figure 10). In this way desirable and preferred future character can be shaped for the various neighbourhoods.





Photo 18, N-1 (M = 5.94, SD = 1.50)

Photo 58, N-3 (M = 2.32, SD = 1.37)

Figure 10: Contrasting Developments – New, Large, Boxy, Colourful, Visually Dominating and Lacking Landscaping Versus Older, Smaller, Understated and Nestled in Mature Indigenous Vegetation

A number of physical attributes were shared by those residential developments that were rated as compatible with neighbourhood character and likewise those perceived to be incompatible with local character. Many of the developments perceived to be compatible with neighbourhood character shared the following attributes:

- Colours that are subtle, neutral, muted, receding and unobtrusive, thus reducing the visual prominence of buildings from the street and/or that are reflective of colours of the area
- Retained indigenous vegetation or indigenous vegetation used in the landscape
- Sufficient landscaping
- Mature trees and vegetation
- Conveying a sense of nostalgia and historic value reflective of old Torquay and Jan Juc
- Built with natural materials such as stone, weatherboard and other types of timber that look natural, lightweight and are reflective of the area
- Have generous setbacks
- On large blocks
- Small footprints
- Unobtrusive and understated in design
- Small in scale
- Roof forms that reflect old beach houses, some having shallow pitched roofs, or other peaked roof types and those with gables
- Rooflines that are broken up by mature canopy trees
- Buildings set below the tree canopy line
- Unique and innovative architectural design
- Balanced design
- Good articulation moderately complex
- Right solar orientation
- Built to maximize and share views
- No front fences, particularly no tall and/or solid fence types

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- Driveways constructed of natural looking materials
- Small driveways
- Low density development
- Not too tall at most two storeys
- Interesting mix of houses of different forms and colour moderate complexity within a given neighbourhood area
- Balconies that articulate building form
- Single garages

Developments perceived to be most incompatible with neighbourhood character had:

- Inadequate landscaping
- Lack of mature trees
- No indigenous vegetation or vegetation cleared from site for construction
- Domination of building imposing, too big, fortress-like and "unfriendly looking"
- Concrete and asphalt driveways that look too dominant
- High site coverage
- Boxy and bulking in appearance
- Minimal setbacks on side, front and/or back boundaries
- Front fences that are too high, solid and lacking integration with house design
- Front walls that are large, flat, imposing and unarticulated
- Colours contrasting, not matching, overwhelming, too strong, too pastel, black, aggressive, harsh looking
- "Suburban" and "Urban" looking houses
- Buildings that do not "fit" with street and adjoining lots
- Height too high, particularly three storey and more developments
- Too vertical in orientation
- Too large in mass
- Not responsive to environment solar orientation
- Buildings that lack surface articulation
- Roofs that strongly contrast with their surroundings such as brightly coloured tile roofs
- Not reflective of the area or have no connection with local area
- "Suburban" looking exotic vegetation
- Overly manicured gardens and lawns
- Lots too small for the size of house
- High density
- Windows that are out of scale
- Repetition and uniformity of architectural forms
- Poor proportions of building elements
- Inappropriate siting and unresponsiveness to site
- Lack of verandas
- Flat roofs, particularly those without eaves
- Dominance of garage over house
- Brick veneer with "suburban" appearance
- Too complex in form
- Obstructs views
- "Queensland style" houses
- Inappropriate and ugly signage
- Roofs visible above tree line

It is important to consider these attributes in formulating planning controls that aim to encourage development that will be perceived as compatible with local character and discourage attributes associated with incompatible development. If such planning mechanisms can be successfully implemented and enforced there may be hope that the area's outstanding environmental and

residential character might not be lost or seriously degraded in the future, even in the face of continuing and rapid development and town growth.



Photo 4, N-3 (M = 5.62, SD = 1.62).

Photo 77, N-5 (M = 5.59, SD = 1.74)

Figure 11: Boxy and Repetitive Architectural Forms, High Site Coverage, Minimal setbacks and Limited Landscaping





Photo 5, N-6 (M = 5.24, SD = 1.81)Photo 38, N-3 (M = 5.24, SD = 1.96)Figure 12: Three Storey Developments Adjacent to Coastal Reserves

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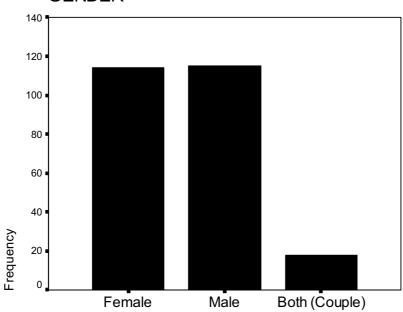
Appendix A

Demographic and Background Details of Neighbourhood Character Mail Questionnaire Respondent Sample

In total 293 people responded out of the 5756 questionnaires sent out resulting in a little over 5% overall response rate.

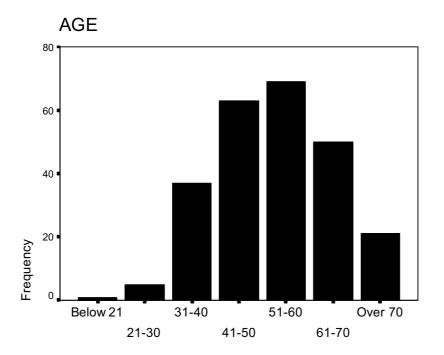
GENDER

	Frequency	Percent	Valid Percent
Female	114	38.9	46.2
Male	115	39.2	46.6
Both	18	6.1	7.3
(Couple)			
Sub-Total	247	84.3	100.0
Missing	46	15.7	
	293	100.0	



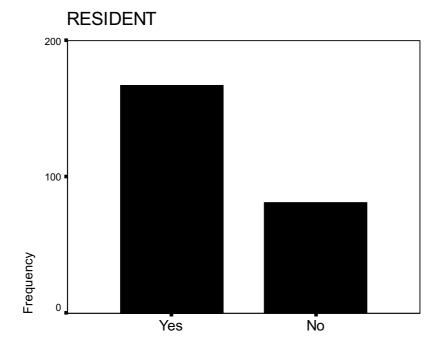
GENDER

AGE			
	Frequency	Percent	Valid Percent
Below 21	1	.3	.4
21-30	5	1.7	2.0
31-40	37	12.6	15.0
41-50	63	21.5	25.6
51-60	69	23.5	28.0
61-70	50	17.1	20.3
Over 70	21	7.2	8.5
Sub-Total	246	84.0	100.0
Missing	47	16.0	
Total	293	100.0	



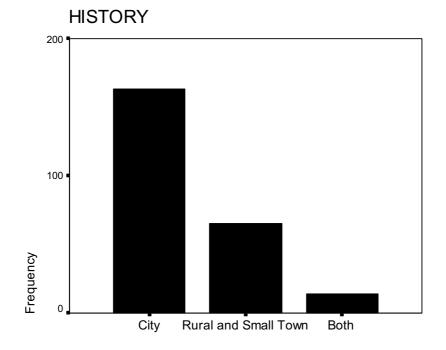
RESID	ENT
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	Frequency	Percent	Valid Percent
Yes	167	57.0	67.3
Νο	81	27.6	32.7
Sub-Total	248	84.6	100.0
Missing	45	15.4	
Total	293	100.0	



LENGTH OF RESIDENCY	
Valid	123
Missing	170
Mean	15.1667
Median	12.0000
Std. Deviation	12.9458
Minimum	1.00
Maximum	57.00

HISTORY			
	Frequency	Percent	Valid Percent
City	163	55.6	67.4
Rural and Small Town	65	22.2	26.9
Both	14	4.8	5.8
Sub-Total	242	82.6	100.0
Missing	51	17.4	
Total	293	100.0	



	Frequency	Percent	Valid Percent
Yes	156	53.2	53.2
Νο	137	46.8	46.8
Total	293	100.0	100.0

Appendix B

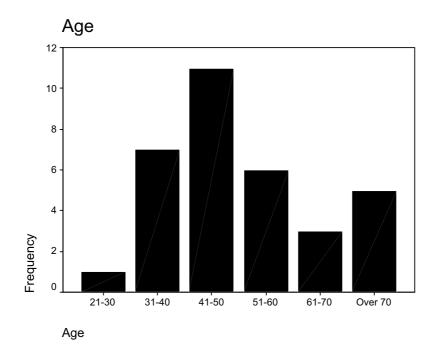
Demographic and Background Details of Photo Rating Community Workshop Respondent Sample

Gender

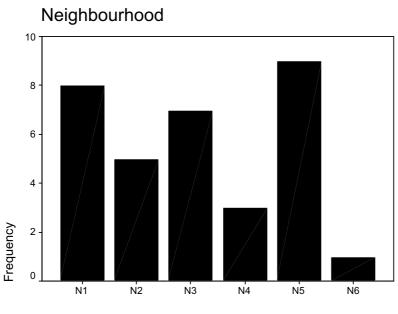
	Frequency	Percent	Valid Percent
Female	17	50.0	53.1
Male	15	44.1	46.9
Total	32	94.1	100.0
Missing Values	2	5.9	
Total	34	100.0	

Age

	Frequency	Percent
21-30 Years	1	2.9
31-40 Years	7	20.6
41-50 Years	11	32.4
51-60 Years	6	17.6
61-70 Years	3	8.8
Over 70 Years	5	14.7
Total Responses	33	97.1
Missing Values	1	2.9
Total Sample	34	100.0



Neighbourhood Neighbourhood Frequency	Percent	Valid Percer		
Precinct			Percent	
N1	8	23.5	24.2	24.2
N2	5	14.7	15.2	39.4
N3	7	20.6	21.2	60.6
N4	3	8.8	9.1	69.7
N5	9	26.5	27.3	97.0
N6	1	2.9	3.0	100.0
Total Responses	33	97.1	100.0	
Missing Values	1	2.9		
Total Sample	34	100.0		



Neighbourhood

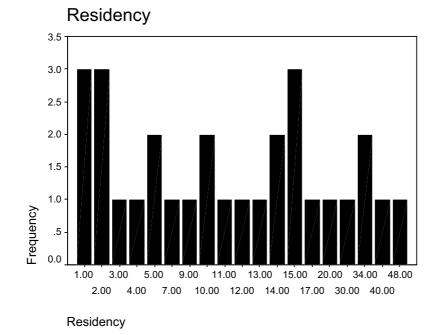
Resident

	Frequency	Percent	Valid Percent	Cumulative
				Percent
Resident	24	70.6	75.0	75.0
Nonresident	8	23.5	25.0	100.0
Total	32	94.1	100.0	
Responses				
Missing Values	2	5.9		
Total Sample	34	100.0		

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Residency

	Years	Frequency	Percent	Valid Percent
	1.00	3	8.8	10.3
	2.00	3	8.8	10.3
	3.00	1	2.9	3.4
	4.00	1	2.9	3.4
	5.00	2	5.9	6.9
	7.00	1	2.9	3.4
	9.00	1	2.9	3.4
	10.00	2	5.9	6.9
	11.00	1	2.9	3.4
	12.00	1	2.9	3.4
	13.00	1	2.9	3.4
	14.00	2	5.9	6.9
	15.00	3	8.8	10.3
	17.00	1	2.9	3.4
	20.00	1	2.9	3.4
	30.00	1	2.9	3.4
	34.00	2	5.9	6.9
	40.00	1	2.9	3.4
	48.00	1	2.9	3.4
Total Responses		29	85.3	100.0
Missing		5	14.7	
Responses				
Total Sample		34	100.0	



Environment Type	Frequency	Percent	Valid Percent	Cumulative Percent
Large/regional city	24	70.6	72.7	72.7
Rural area/small town	9	26.5	27.3	100.0
Total Responses	33	97.1	100.0	
Missing Responses	1	2.9		
Total Sample	34	100.0		

Environmental History – Where Respondents Grew Up

Appendix C

Neighbourhood Character Mail Questionnaire Response Tables

The tables in this appendix record the types and frequency items were mentioned in the mail questionnaire that were used to guide field photography.

Mail Questionnaire Results – Features Identified as Contributing to Neighbourhood Character

Feature	Freq.	Comments
Neighbourhood Precinct 1		
Views:		
View of ocean/ sea	11	
View of coastline	9	
View to Bellbrae	4	
View of Torquay from the beach	4	
View from Sundial	3	
View of Point Danger	3	
View to Barwon Heads	2	
View to beach	2	
View to cliffs	1	
View from foreshore picnic area	1	
• View from the top of the dune on White's Beach	1	
Development:		
Houses on the Esplanade	7	
Playground	7	
Tennis Courts	7	
Nice/ beautiful houses	5	
Sundial	5	
No power lines	4	
Courts/ Culs de sac development	3	
Similar types of houses	3	
Low density housing	2	
Well maintained Development	2	
Fences	2	
Single storey houses	2	
Timber houses	1	
Suburban housing	1	
Low rise Development	1	
Houses with views	1	
Caravan Park	1	
Natural Features/ Open space:		
Deep Creek Reserve	38	
Whites Beach	17	
Sand dunes	9	
Openspace	8	
Beaches	8	
Foreshore reserve	7	
Parkland	6	
New Golf Course	4	
Wetland area	3	Redeveloped
Yellow Bluff	3	
Pastoral land	1	
Vegetation:		
Bush	6	Deep Creek

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•	Neat Gardens	5	
•	Gum trees	5	
•	Grass Trees	3	Deep Creek
•	Landscaping around houses	3	
•	Native grasses	3	
•	Native gardens	2	
•	Native vegetation	2	
•	No weeds	1	
٠	Grassy areas	1	Foreshore
	-		
Acces	S:		
•	Deep Creek trail/ track	13	
•	New foreshore walking track	10	Steps and bridge
	Walking tracks/ paths	7	
•	Beach walks	6	
	The Esplanade	5	
	Quiet streets	3	
•	Wide streets	3	
		2	Landagana and fansing
	Entry to South Beach Estate		Landscape and fencing
•	Beach access	1	
A	4!		
Activi			
	Walking	5	
	Windsurfing	2	
•	Swimming	1	
•	Boating	1	
Misce	llaneous:		
•	Clean	3	
•	Quiet	3	
•	Diverse community	2	
•	Neat	2	
•	Safe	1	
Neigh	bourhood Precinct 2		
Views			
	View of sea/ ocean	10	
•	View of Fisherman's Beach	5	1
•	View to Barwon Heads	4	
•	View of coastline	4	
•	View of White's Beach	2	
•	View of Point Danger	1	
-			
Devol	opment:		
	"Old Torquay" houses	12	Holiday and permanent
•			
•	Sundial	8	
•	Low rise development	6	
•	Boat Ramp	5	-
•	Large block size	5	
•	Caravan park	3	
•	Playground	3	
•	Beach style architecture	3	
•	Zeally Bay shop	2	
•	Sufficient setbacks	2	

Deep Creek bridge	2	
Fibro beach houses	2	
Verandahs	1	_
Bungalow style beach houses	1	
Yacht club	1	
Tennis courts	1	
Natural Features/ Openspace:		
Taylor Park	23	Including new water feature
Deep Creek Reserve	22	5
Fisherman's Beach	13	
Natural foreshore	7	
Beach walks	5	
Sand dunes	4	
Nature strips	4	
Yellow Bluff	3	
Deep Creek	3	
Elephant Walk	2	
Pastoral surroundings	1	
Vegetation:		
 Indigenous vegetation 	7	
Gum trees	7	
Trees on old blocks	6	
Trees	5	
Grasses	5	
• Bush	2	
 Vegetation along Deep Creek 	2	
Native street trees	1	
Gardens	1	
Access:	10	
Deep Creek track/trail	10	
Beach access	7	
Trails/ walks	5	
No footpaths	2	
Fischer Street	2	
Felix Crescent	1	
Wide streets	1	
Activities:		
Walking	4	
Boating	4	
Non motorized water sports	2	
Fishing	2	
Swimming	1	
Owninning		
Neighbourhood Precinct 3		
Views:		
View of Sea/ Ocean	11	
View of Back Beach	10	
View down the street to the ocean	9	Gilbert Street, Beach Road
View over Spring Creek Reserve	7	
View of Point Danger	6	

	View un/ down Front Booch	5	
•	View up/ down Front Beach	5	At the end of streets
	View of Taylor Park View of golf course	3	At the end of streets
	View of coastline	3	
	View towards Jan Juc	3	
	View of Rocky Point	2	
	View up Spring Creek	2	
•	Uninterrupted views	1	
•	Offinterrupted views	1	
Dovol	opment:		
Devel	Gilbert Street shops/ restaurants	16	
•	Old houses/ buildings	14	
•	Surf Life Club	12	
•	Shops/ restaurants	12	
-	Large blocks	11	
•	Single storey development	10	
•	Large set backs	9	
	Low scale development	8	
-	Bell Street shops/ restaurants	8	
•	Old school grounds	8	Cricket pitch, oval
•	Low density development	7	
•	Playground	7	
•	"Old Torquay"	7	
•	Village commercial center	6	
•	Caravan Park	6	
•	Esplanade Restaurants	5	
•	Old Town Hall	5	
•	Historic house	4	Built by Colonel Price
•	Unobtrusive housing design	4	
•	Sympathetic renovation of old house	3	Fischer Street
•	Barwon Health/ Dentist	3	
•	Subdued house colours	3	
•	Church	3	
•	Old house on the corner Anderson and Pearl Streets	3	
•	Craft Shop	3	
•	Point Danger car park	3	
•	Variation in periods of housing stock	2	
•	The Cottage	2	
•	Russell's house	2	
•	Scammel House	2	
•	Continuity of building style	2	
•	Appropriate architecture	1	
•	Sculptures	1	
Natura	al Features/ Openspace:		
•	Taylor Park	32	Bush, ponds, bowling green
•	Front Beach	22	
•	Back Beach	17	
•	Point Danger	17	
•	Spring Creek Reserve/ wetlands	16	Boardwalks
٠	Beaches	16	
•	Foreshore reserves	14	No development
٠	Fisherman's Beach	8	Boat ramp
•	Cosy Corner	7	

• Taylor Park water feature 7 • Nature strips 6 • Beach walks 5 • Open sapect 5 • Open sapect 5 • Bird life 3 • Yellow Bluff 2 • Ciffis 2 • Sand dunes 1 • Cockatoos 1 • Norfolk Island Pines on Front Beach 12 • Tree lined streets 11 • Indigenous vegetation 9 • Large mature gardens 8 • Large mature gardens 8 • Large mature gardens 8 • Large mature and pardens 4 • Moonah trees 4 • Moonah trees 4 • Moonah trees 4 • Monoah trees 1 • Large Gum trees 2 • Remnant indigenous coastal vegetation 4 • Large Gum trees 2 • Remnant indigenous coastal vegetation 1 • Cypress trees 1 • Wide streets 9 • W				
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• Bell Street 7 • Spring Street 5 • Munday Street 2 • Pride Street 2 • Anderson Street 2 • Continuity of streetscapes 1 • Price Street 1 • Beales Street 1 • Beales Street 2 • Walking 5 • Surfing 2 • Surfing 1 • Windsurfing 1	•	Wide streets	9	
• Spring Street 5 • Munday Street 2 • Pride Street 2 • Anderson Street 2 • Continuity of streetscapes 1 • Price Street 1 • Beales Street 1 • Walking 5 • Surfing 2 • Surf Kites 2	•	Gilbert Street	8	Landscaping
• Munday Street 2 • Pride Street 2 • Anderson Street 2 • Continuity of streetscapes 1 • Price Street 1 • Beales Street 1 • Walking 5 • Surfing 2 • Surf Kites 2 • Windsurfing 1	•	Bell Street	7	
 Pride Street Anderson Street Continuity of streetscapes Price Street Beales Street Beales Street Malking Surfing Surf Kites Windsurfing 1 	•	Spring Street	5	
• Pride Street 2 • Anderson Street 2 • Continuity of streetscapes 1 • Price Street 1 • Beales Street 1 • Walking 5 • Surfing 2 • Surf Kites 2 • Windsurfing 1	•	Munday Street	2	
• Anderson Street 2 • Continuity of streetscapes 1 • Price Street 1 • Beales Street 1 • Walking 5 • Surfing 2 • Surf Kites 2 • Windsurfing 1	•		2	
• Price Street 1 • Beales Street 1 • Walking 5 • Walking 5 • Surfing 2 • Surf Kites 2 • Windsurfing 1	•		2	
• Beales Street 1 Activities: - • Walking 5 • Surfing 2 • Surf Kites 2 • Windsurfing 1	•		1	
Activities: Image: Constraint of the second secon	•	Price Street	1	
• Walking 5 • Surfing 2 • Surf Kites 2 • Windsurfing 1	•	Beales Street	1	
• Walking 5 • Surfing 2 • Surf Kites 2 • Windsurfing 1	Activi	ties [.]		
• Surfing 2 • Surf Kites 2 • Windsurfing 1			5	
Surf Kites 2 Windsurfing 1				
Windsurfing				
Boating 1 Sports 1				
	•	орона	'	
Miscellaneous:	Misce	llaneous:		
Privacy 5	٠	Privacy	5	

	Old and aide/ neutical village stress the	1	
•	Old sea side/ nautical village atmosphere	4	
•	Rural small town atmosphere	3	
•	Clean beach		
•	Safe	2	
•	Space	2	
•	Holiday atmosphere	2	
•	Café scene	2	
	bourhood Precinct 4		
Views			
•	View over golf course to ocean/ sea	17	
	View over Spring Creek valley and reserve	11	Also to ocean
	View of ocean/ sea	9	
	View of pastoral land	8	
	View along Spring Creek to ocean	6	Also inlet
•	View over golf course	5	
•	View of Barwon Heads	3	
	View of Deep Creek Valley	3	
	View of Surf Club	2	
•	View of sports field	2	
•	View of Mornington Peninsula	1	
•	View of bush	1	
Devel	opment:		
•	Surf Coast Plaza	12	
•	New houses	4	
	Interesting architecture	3	
•	Shops	2	
•	Quality homes	2	
•	Library	2	
•	Football oval	2	
•	No units	1	
•	Lovely homes	1	
		-	
Natur	al Features/ Openspace:		
·	Spring Creek and reserve	33	Also track
•	Parkland	9	Park at Ocean View Estate
•	Deep Creek and reserve	4	
•	Pastoral land	3	
•	Openspace	2	
•	Openspace	2	
Vagat	ation		
Veget		4	
•	Bush Maanah traca		
•	Moonah trees	3	
•	Indigenous vegetation	2	
•	Remnant Messmate forest		
•	Gum trees	2	
•	Grass Trees	2	
•	Trees	2	
•	Landscaping at Surf Coast Plaza	2	
•	Wide streets	1	
•	Palm trees	1	
•	Pine trees	1	
•	Gardens	1	

A		
Access:	4	
Walking tracks	3	
Road signage	3	
Access to shops		
Activities		
Activities:		
Walking	4	
B41		
Miscellaneous:		
Quiet	3	
Neighbourhood Precinct 5		
View:		
View of coastline	19	
View of Ocean/ sea/ surf	18	
View of Jan Juc with ocean beyond	13	
View of golf course	11	
View of Bell's Beach	10	
View from lookout	9	Off of car park
View of pastoral land	8	
View of Jan Juc Beach		
View of openspace/ reserves	5	
View of Torquay	1	
View down the street to the ocean	1	
Development		
Development:		
Jan Juc shops	19 10	Qual tannia aquita
Recreation reserve	10	Oval, tennis courts
Variety of house styles	9	
Surf Life Club	8	
Large land lots/ acreages No units	7	
	5	
Low scale development Coastal beach style architecture	4	
	4	Including fibro
Old beach houses Interesting architecture	4	
Preschool	3	
Large setbacks	3	
Bird Rock Cafe	3	
Low key commercial area	3	
Painted toilet blocks	3	
Rustic timber houses	2	
Attractive houses	2	
Two storey houses	2	
Small streets	2	
Playground	2	
School	2	
No Estates	2	Suburban
Houses backing onto creek reserve	1	
	1	
No fences	1 -	
	1	
	1	

atural Features/ Openspace:		
Cliff walk	30	
 Jan Juc Creek reserve and track 	30	
Jan Juc Beach	22	
Foreshore reserve	16	Also Bell's Beach reserve
Parkland	13	
Bird Rock	13	
Golf course	12	
Cliffs	12	
Openspace	7	
Bell's Beach	5	
Pastoral land	5	
• Hills	4	
Surf beaches	3	
Ironbark Basin	1	
Sunrise	1	
Sunset	1	
Sand dunes	1	
getation:		
Indigenous coastal vegetation	17	
Trees/ Landscaping around houses	11	
Bush	9	Remnant bushland
	8	Remnant busiliand
Trees Cordona	5	
Gardens	4	
Indigenous gardens		
Nature strips	2	
Mature Gum Trees		
Mixture of vegetation	1	
• Tea Tree	1	
Plantations	1	
cess:		
Tracks/ walks	34	
Boardwalks and steps	10	
Lookouts	8	
Beach access	3	
Access to shops	1	
Muirfield Avenue	1	
Hoylake Avenue	1	
tivities:		
Walking	3	
Bikes	2	
Surfing	1	
Swimming	1	
• Gwinning	' '	
scellaneous:		
Low key/ casual	5	
Quiet	2	
• Green	2	
Rustic charm	1	

Neighbourhood Precinct 6			
View:			
View of Ocean/ sea/ surf		8	
View of coastline		7	
View of golf course		7	
View of Jan Juc with ocean b	pevond	6	
View of Bell's Beach	Joyona	3	
View of Torquay		3	
View of pastoral land		2	
View from lookout		2	Off of carpark
View of Jan Juc Beach		1	
			-
Development:			
Recreation reserve		9	Oval, tennis courts
 Jan Juc shops 		7	Pub, cafes
Large land lots/ acreages		6	
Old beach houses		6	Including fibro
Playground			
 Low scale development 			
Renovated houses			
Interesting architecture			
"Old Jan Juc"			
Bird Rock Cafe			
 Painted toilet blocks 			
Attractive houses			
No units			
Low density			
Surf Life Club			
Variety of house styles			
Natural Features/ Openspace:			
Cliff walk		20	
Jan Juc Creek reserve and ti	rack	8	
Parkland		8	
Jan Juc Beach		8	
Openspace		8	
Foreshore reserve		8	Also Bell's Beach reserve
Cliffs		7	
Pastoral land		3	
Beaches		3	
Birdlife		3	
Golf course		2	
Bell's Beach		2	
Ironbark Basin		1	
Echidna		1	
Wildlife		1	
No			
Vegetation:	_	10	
Indigenous coastal vegetatio	n	16	Demonstration
Bush		5	Remnant bushland
Nature strips		3	
Trees/ Landscaping around h	nouses	4	
Mature Gum Trees		2	

Trees	2
Indigenous gardens	1
Moonah trees	1
Heathland	1
Access:	
Tracks/ walks	25
Great Ocean Road	4
Beach access	2
Gravel roads	1
Miscellaneous:	
Quiet	1
Clean beach	1

Mail Questionnaire Results – Features Identified as Incompatible with Neighbourhood Character

	bourhood Character		
	bourhood Precinct 1		
Views			
•	Views blocked by vegetation	2	
٠	Houses blocking views	1	
Develo	opment:		
٠	High density development	10	Crowded onto block
٠	Units/ townhouses on Esplanade	7	
•	Over developed	6	
٠	High rise development	5	
•	Multi unit development	5	
٠	Two storey units	5	
•	Inappropriate/ unsympathetic architecture	4	
٠	South Beach Estate	3	
٠	Small setbacks	3	
٠	Narrow streets	3	
•	Townhouses	3	
٠	Homogenous/ urban style housing	3	
•	Fences	2	
٠	Poorly maintained properties	2	
٠	Small blocks	2	
٠	Small courts	1	
٠	Boxy architecture	1	
•	Power poles	1	
Natura	al Features/ Openspace:		
•	Poorly maintained foreshore/ reserve	8	
•	Seaweed	4	
•	Deep Creek inlet	2	
•	Lack of parkland	1	
Vegeta	ation:		
•	Dead trees/ plants	6	Deep Creek reserve
•	Lack of landscaping along streets	5	
٠	Poorly maintained nature strips	3	
•	Lack of trees/ landscaping around houses	3	
٠	Exotic species	2	
٠	Weeds	2	
•	Coastal Tea Tree	1	
A	•		
Acces	-		
•	The Esplanade	7	
•	No footpaths	1	
Misce	llaneous:		
•	Rubbish	11	Deep Creek reserve
•	Traffic	11	
•	Parking	9	
•	Lack of amenities	5	
•	Poor maintenance of amenities	3	
•	Crowding	3	
•	Noise	3	

Neigh	bourhood Precinct 2		
Views			
٠	Views blocked by trees	2	
Devel	opment:		
•	High density development	12	Crowding onto blocks
•	Unsympathetic/ Inappropriate architecture	8	
•	Multi unit development	5	
•	Power poles	3	
•	High rise units	2	
•	Two storey development	2	
٠	Loss of old houses	2	
•	Caravan Park	1	
•	Subdivisions	1	
Natur	al Features/ Openspace:		
•	Rubbish in Deep Creek	1	
•	Open drain through beach area	1	
•	Degraded Foreshore	1	
Voge	ation:		
	Lack of trees	3	
•	Poorly maintained gardens	2	
•	Overgrown nature strips	2	
•		1	
•	Lack of vegetation around houses	1	
•	Dead grass	1	
•	Exotic vegetation	1	
•	Cypress trees	1	
Acces			
٠	No foot paths	1	
•	Gravel roads	1	
Activ	ities.		
•	Jet skis	4	
	ellaneous:		
•	Traffic	6	
•	Noise pollution	3	
•	Rubbish Poor lighting	2	
	bourhood Precinct 3 ews:		
	View of Ocean View Estate	6	
•		1	
•	Views blocked by trees	1	
•	Views blocked by development	1	
Deve	opment:		
•	High density development	34	Crowded onto block, urban
•	Two storey units/ houses	19	
٠	Inappropriate/ unsympathetic architecture	14	
٠	Proposed supermarket development	13	
•	Insufficient setbacks	10	

• New development in "Old Torquay" 7 • Parking areas behind Gilbert Street shops 7 • Units on Anderson Street 7 • Buildings intruding into streetscapes 6 • Multi unit development 6 • Townhouses 6	
• Units on Anderson Street 7 • Buildings intruding into streetscapes 6 • Multi unit development 6	
Buildings intruding into streetscapes G Multi unit development G	
Multi unit development 6	
• Townhouses	
Multi storey development 6	
Loss of old buildings/ houses 5	
Two Bays development 5	
Ugly units 5	
Townhouses/ units on Pearl Street 4	
Three/ four two storey units built on one block 4	
Two storey units destroying privacy 4	
Homogenous/ urban style housing 4	
Poor quality materials 4	
Shabby run down properties 4	
Boxy houses 4	
Car wash	
Industrial buildings 3	
Fences 3 Paling, brick	
Dominating/ obtrusive architecture	
Inappropriate colours 2	
Balconies 2	
Driveways	
Small blocks 2	
Over improvement of park 1 Taylor Park	
Old school site	
Natural Features/ Openspace:	
Pollution in Spring Creek	
Erosion on cliffs 2	
Vegetation:	
Vegetation: Image: Constraint of the set of the	ost
Loss of trees/ vegetation for development Lack of trees/ landscaping around development 8	ost
Loss of trees/ vegetation for development Lack of trees/ landscaping around development Lack of landscaping along streets	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 On cliffs	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1 • Queensland Palm trees 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1 • Inappropriate street trees 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1 • Queensland Palm trees 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1 • Inappropriate street trees 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1 • Inappropriate street trees 1 • Cypress trees 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Queensland Grass Trees 1 • Queensland Palm trees 1 • Low profile new landscaping 1 • Low profile new landscaping 1	ost
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Weeds 1 • Queensland Grass Trees 1 • Queensland Palm trees 1 • Inappropriate street trees 1 • Low profile new landscaping 1 • No foot paths 4	ost
Loss of trees/ vegetation for development18Sites denuded, old treesLack of trees/ landscaping around development8Lack of landscaping along streets6Lack of vegetation in Taylor Park3Exotic plants3Weeds2On cliffsBuckthorn1Queensland Grass Trees1Queensland Palm trees1Inappropriate street trees1Cypress trees1Low profile new landscaping1No foot paths4Unmade footpaths3	
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Weeds 1 • Queensland Grass Trees 1 • Queensland Palm trees 1 • Inappropriate street trees 1 • Low profile new landscaping 1 • No foot paths 4	
• Loss of trees/ vegetation for development 18 Sites denuded, old trees • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Weeds 2 • Queensland Grass Trees 1 • Queensland Palm trees 1 • Inappropriate street trees 1 • Low profile new landscaping 1 • No foot paths 4 • Unmade footpaths 3	
• Loss of trees/ vegetation for development 18 Sites denuded, old trees I • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1 • Queensland Palm trees 1 • Cypress trees 1 • Low profile new landscaping 1 • No foot paths 3 • No foot paths 3 • Signage 3	
• Loss of trees/ vegetation for development 18 Sites denuded, old trees I • Lack of trees/ landscaping around development 8 • Lack of landscaping along streets 6 • Lack of vegetation in Taylor Park 3 • Exotic plants 3 • Weeds 2 • Buckthorn 1 • Queensland Grass Trees 1 • Queensland Palm trees 1 • Cypress trees 1 • Low profile new landscaping 1 • No foot paths 3 • No foot paths 3 • Signage 3	

Neighbourhood Precinct 4		
Views:		
View of Ocean Views Estate	4	
 Views blocked by new development 	4	
View of car wash	2	
View of industrial area	1	
Development:		
Ocean Views Estate	15	
Insufficient setbacks	4	
High density development	3	
Development too high	3	
Suburban Sprawl	3	
MacDonalds	3	
Industrial area	3	
Inappropriate colours	3	
Court style development	2	
Two storey development	2	
Brick construction	2	
 1970s houses 	2	
 Georgian style development 	1	
Fences	1	
Zinc sheds	1	
Large scale houses	1	
Power poles	1	
Units	1	
Natural Features/ Openspace:		
Rabbits	1	
Vegetation:		
 Lack of landscaping/ trees around development 		e.g. Great Ocean View Estate
Lack of openspace	4	
 Poor maintenance of trees/ landscaping 	2	
Dead trees		
Access:		
No footpaths	2	
Ocean View Crescent	2	
Gravel roads	1	
The Mews	1	
Elizabeth Court	1	
Miscellaneous:		
Traffic	8	
 Pollution in Creek/ reserve 	5	
Rubbish	2	
Parking	2	
Signage	1	
Neighbourhood Precinct 5		
Views:		
Views of Great Ocean Views EstateViews blocked by development	10 8	

Views blocked by trees	4	
Development:		
Jan Juc shops	23	Also behind shops
Unsympathetic/ inappropriate architecture	20	Obtrusive, large
Suburban sprawl	17	Rural land
Run down houses/ buildings	10	
Three storey development	8	Houses, units
Suburban style architecture	7	Great Ocean View Estate
Unfinished houses	7	
Pab's Tavern	6	Behind commercial, wall
Large house on a small block	6	
Inappropriate materials	6	Cheap/ poor quality
Three, two storey units on one block	5	
Power poles	5	
Loss of privacy resulting from development	it 5	
High density development	5	
Two storey townhouses/ units	5	
Insufficient setbacks	4	
Lack of energy efficiency in development	3	Solar exposure
Development on Ozan Crescent	3	
Relocated houses	2	
Vacant properties	2	
Inappropriate colours	1	
Brick construction	1	
Queensland style strip development	1	
Sterile homogenous development	1	
Too much paving	1	
Small blocks	1	
latural Features/ Openspace:		
Parkland needs improvement	10	Landscaping
Poorly maintained reserve	9	
Creek running through drain	3	
	5	
/egetation:		
 Lack of trees/ landscaping around develop 	oment 20	
 Lack of street trees/ landscaping 	14	
Lack of landscaping in reserves	10	Creek, foreshore
Removal of trees/ vegetation for developm		
Weeds	6	
Damage to indigenous vegetation	5	
Lack of nature strips	5	
	3	
Exotic vegetation	3	
	3	
 Lack of indigenous/ native vegetation Overgrown vegetation 	3	
Lack of indigenous/ native vegetation Overgrown vegetation	3 3	
Lack of indigenous/ native vegetation Overgrown vegetation Access: Unsealed roads	3 3 7	
 Lack of indigenous/ native vegetation Overgrown vegetation Access: Unsealed roads No footpaths 	3 3 7 6	
 Lack of indigenous/ native vegetation Overgrown vegetation Access: Unsealed roads No footpaths Access to Bird Rock 	3 3 7 6 5	
 Lack of indigenous/ native vegetation Overgrown vegetation Access: Unsealed roads No footpaths 	3 3 7 6	

Misce	llaneous:		
•	Rubbish/ garbage	7	
•	Traffic	7	Congestion, hazards
•	Signage	3	
•	Messy/ untidy	3	
•	Drainage ditch	2	
•	Graffiti	1	
•	Noise	1	
•	Vandalism	1	
Neigh	bourhood Precinct 6		
Views	:		
•	View of white house from the cliff walk/ reserve	2	
•	View of houses from the beach	1	
Devel	opment:		
٠	Jan Juc shops	10	
٠	Suburban sprawl	8	Rural land
•	Views of Great Ocean Views Estate	6	
٠	Pabs Tavern	4	Behind commercial, wall
٠	Unsympathetic/ inappropriate architecture	4	Obtrusive, large
•	Run down houses/ buildings	4	
•	Urbanization	3	
•	Two storey townhouses/ units	3	
•	Three storey development	3	
•	Three, two storey units on one block	3	
•	Units behind Jan Juc shops	3	
•	Power poles	2	
•	Bird Rock Cafe	2	
•	Vacant properties	2	
•	Loss of privacy resulting from development	2	
•	Inappropriate colours	1	
•	Cheap/ poor quality materials	1	
•	Large house on a small block	1	
•	Houses too close to the reserve	1	
Natura	al Features/ Openspace:		
٠	Parkland needs improvement	12	Landscaping
•	Poorly maintained reserve	3	
Veget	ation		
- a	Lack of landscaping in reserves	5	Creek, foreshore
•	Lack of street trees/ landscaping	3	
•	Inappropriate gardens	3	
•	Weeds	3	
•	Lack of nature strips	2	
	•	2	
•	Dying trees Lack of trees/ landscaping around development	2	
•		1	
•	Overgrown vegetation	1	
•	Exotic vegetation		
•	Lack of indigenous/ native vegetation	1	
•	Bone seed	1	
•	Pine trees	1	
•	Bull Rushes	1	

Replacement of exotic species with indigenous	1	
Access:		
Carparks	5	"Boobs" carpark
Access to Bird Rock	2	
No footpaths	2	
Ocean Boulevard	2	
Access to Bird Rock	2	
Unsealed roads	1	
No access to heathland	1	
Miscellaneous:		
Rubbish/ garbage	6	
Traffic	5	Congestion, hazards
Signage	2	
Messy/ untidy	2	
Vandalism	1	
Vermin	1	

Appendix D

Focus Group One Results

Focus Group One discussions were conducted as part of the community workshop. Respondents were assigned to one of Six focus groups according to the neighbourhood precinct in which they live. Three questions concerning existing and future character of their neighbourhood were addressed and each group was assigned a facilitator. Responses were recorded at the time and later transcribed and are presented in this appendix.

PRECINCT ONE

1. What features of the precinct positively contribute to its character?

- Diversity of housing styles
- White's Beach
- Sand dunes
- Deep creek
- Sun dial
- Dog beach
- Foreshore nature reserve and new track
- Parking opportunities within the coastal vegetation (at track Horseshoe Bend)
- Block size bigger and generous setbacks
- Footprint to block size ratio
- Houses don't take up all the block, they have gardens around house
- Lower density housing

2. What features of the precinct detract from its character?

- Subdivision of land creating higher densities
- Parts of foreshore need maintenance and upgrading using indigenous vegetation
- Dog restrictions on beach
- Lack of enforcement of rules ie. dog droppings
- Kerb and channel road design is not sympathetic to coastal character eg. roll over kerbs
- Lack of open space/open space network within residential areas, including walking and bike paths, green corridors and links between residential areas/foreshore/Deep Creek/public areas
- Erosion of the dunes
- Mass manufactured housing styles without distinctiveness is degrading residential character

3. How would you like to see the precinct develop into the future? What is the preferred character?

- Pooper scoops along Whites Beach
- Extend foreshore beautification from Deep Creek to Whites Cutting
- Retain mix of housing styles but not 'in your face' type designs or large areas of boxes or typical suburban styles
- Good examples of sympathetic design is in Pomora Avenue, however couple of houses that stand out too much
- Bad examples of design are in Hani Court and Colina Court
- Orungal Court has some interesting and distinctive designs that compliment streetscape
- More open space and green corridors linking public and residential areas

- Roads to enable developments/housing to blend together ie. Ceduna Close compared to the separation created by wide streets with old style kerb and channel (ie. Lochard Drive, Gleneuse Ave)

PRECINCT TWO

1. What features of the precinct positively contribute to its character?

- Taylor Park
- Sun dial
- Fisherman's Beach
- Deep Creek
- Boat ramp
- Established gardens
- Mature trees
- Close to beach and with ocean views
- Birds
- Natural vegetation along sand dunes
- Green grass on nature strips
- Houses set back on block
- Country style environment
- Wide nature strips with trees and bushes
- Historical traditional Torquay like a village within Torquay as the modern estates grow up around it

2. What features of the precinct detract from its character?

- Nude beach
- Unleashed dogs in streets
- Jet skis too close to shore and noisy
- Noisy aeroplanes
- Indistinct divisions between family swimmers, sailing, motor boats and jet skis
- Very modern housing box styles
- New developments encroaching on privacy
- Overcrowding some areas to the detriment of other residences in some areas (not unanimous)
- Triple storey houses blocking views
- Rats coming from over grown lots

3. How would you like to see the precinct develop into the future, ie. what is the preferred character?

- Colour code should be environmentally pleasing, not big coloured boxes (not unanimous)
- More gardens visible from the road
- -

- More street trees, bottlebrush, colourful and indigenous plants
- Underground power
- Maintained nature strips no long grass
- Retain the 'old Torquay character' leave modern housing to the new estates
- An area that is environmentally friendly
- No big mansions or high rise units
- More noise regulation especially during weekends
- Allow dogs to run on Fisherman's Beach before 10am and after 5pm over summer (not unanimous)

PRECINCT THREE

1. What features of the precinct positively contribute to its character?

- Space
- Vegetation
- Trees Moonah's
- Open streetscape
- Single storey houses
- Wide streets
- Unsealed nature strips no footpaths
- Setbacks houses setback from street with larger front yards
- Building design lacks flamboyance
- More subdued, unpretentious
- Variety of materials timber, brick etc
- Vegetation front gardens lower and no fences
- Garages don't dominant building
- Pitched roofing
- Large back yards/open space
- Buildings do not abut next door
- Close to facilities/amenities
- Character not lost yet
- Subdued colours
- Off-street parking

2. What features of the precinct detract from its character?

- Double storey
- More than dual occupancy
- High density/multi storey developments
- Creeping invasion via setback to front/back/side
- Louder colour schemes
- Square/block designs

- Balance between permanent homes/holiday homes/holiday rentals
- Destruction of all vegetation when large blocks are cleared for development
- Overflow of visitor parking to street
- Over crowding of larger blocks
- Council services not reflecting peak times eg rubbish/street cleaning/traffic management

3. How would you like to see the precinct develop into the future, ie. what is the preferred character?

- Wide streets
- Single storey developments with open space around
- Park and school site retained as open space
- Simple materials/subtle colours
- No box/contemporary designs
- Dual occupancy only
- Preservation of vegetation on blocks to be developed mature trees
- Possible transfer of power lines underground
- Speed humps to detract some traffic
- Restrictions on demolition of older style homes
- Building setbacks retained
- Improved maintenance of public spaces
- Retain streetscape (vista)
- Private open spaces

PRECINCT FOUR

1. What features of the precinct positively contribute to its character?

- Deep Creek flora and fauna
- Spring Creek flora and fauna
- Rural outlook farms
- Views valley and ocean
- Natural/original aspects eg remnant messmate, established trees
- School development
- Surf shops
- Bird life
- New residential designs
- Large allotments north of Grossmans Road

2. What features of the precinct detract from its character?

- Proposal to subdivide large blocks
- Proposed new industrial estate off Coomes Road/Highway
- Pollution in Spring Creek litter
- Colour and materials of some of the new development
- Lack of trees footprint of house (ratio)
- No pedestrian crossing over Great Ocean Road
- Height of new houses
- No/ lack of footpaths
- No playground equipment on playground (Ocean views estate)

3. How would you like to see the precinct develop into the future, ie. what is the preferred character?

- Keep residential and industrial zones separate
- Retain rural character of area
- Retention of views of valley (rural land) and ocean (creek)
- Develop sporting area corner of highway and start of Great Ocean Road (improving, upgrading)
- Footpaths on at least one side of the street
- Develop playgrounds neighbourhood playgrounds, upgrade existing ones
- In commercial areas develop everyday shops (milk bar)
- Pedestrian crossings near roundabout, bridge, across from Ocean Views estate
- Low density

PRECINCT FIVE & SIX (groups combined)

1. What features of the precinct positively contribute to its character?

- Beach
- Cliff top walk
- Treed areas reserves and parks
- High level of vegetation in residential properties
- Golf course
- Creek reserves
- Reasonable sized blocks
- Reasonable ratio of building to block size
- More variation in building styles (traditional and contemporary)
- Low rise, beach style (traditional Jan Juc)
- Changing to higher (2 storeys) changes not as incompatible with traditional Jan Juc character as in Torquay
- More 'infill' development than large subdivisions
- Variation in setback
- Grass land and football oval
- Lower fences

- Traffic lights
- Substantial vegetation in residential blocks

2. What features of the precinct detract from its character?

- Shopping centre lack of vegetation, asphalt expanse and poor quality architecture
- Backside of shopping centre
- Views of ocean views estate
- Traffic lights
- Town house development moonscaping and building to boundaries
- Inappropriate subdivision
- Collection of debris in reserves lack of maintenance
- Lack of street tree planting

3. How would you like to see the precinct develop into the future, ie. What is the preferred character?

- Regulation of new subdivision and development of higher land with views in light of the impact of Ocean Views Estate
- Subdivision sizes shouldn't be too small
- Restriction of number of town house developments per area
- In redevelopment phase should take account retention of positive characteristics and avoidance of negatives
- Better regulation and enforcement of setbacks, building footprint /block ratios and appropriate/adequate vegetation
- Height restrictions, especially in new subdivision areas with potential views
- Appropriate designs, including colours
- Require use of indigenous vegetation
- Upgrade of vegetation and stormwater management along creek reserves
- Protection of coastal environment through appropriate stormwater treatment/management
- Protect existing vegetation on public and private land
- Street trees provide strong framework of significant streetscape planting
- Retain the low key commercial centre, but improve landscape and built elements
- Create a low key social centre for Jan Juc
- Retain and encourage open, social street character avoid high fences and fortress-like building fronts
- Industrial development not appropriate for Jan Juc

Appendix E

Focus Group Two Results

Focus Group Two discussions involved the community reference group being shown results from the photo rating exercise held at the community workshop. Respondents (N=10) viewed all stimuli photographs along with their associated rating scores (mean and standard deviation character compatibility values). Results were presented to respondents via a PowerPoint presentation from most to least compatible for each neighbourhood precinct and their comments relative to each photo were recorded at the time and later transcribed.

	nents, Photos and Rating V Neighbourhood Or	
Positive Attribute	Negative Attribute	Photographs / Rating Values
 Roof form – gable, peaks, colour Beachy – bathing box Low maintenance Small footprint and scale 	 Minimal setback Proportions of building form Suburban in terms of concrete and lawn Small lot 	Number 56 (M = 3.62, SD = 1.7
	 Commercial/ resort style Not reflective of area Siting inappropriate Dated 	Number 59 (M = 3.91, SD = 1.9)
 Dark colours reduce prominence of those sections Use of stone reflective of area 	 Contrasting colours Not enough articulation Bulky Looks to have been added Window scale too small Proportions incorrect Landscaping inadequate Car domination Too suburban – concrete/lawn High site coverage 	Number 59 (M = 3.91, SD = 1.9
 No front fence Addresses the street 	 Angli site coverage No local connection Suburban Setbacks from side boundaries Footprint Not site responsive No indigenous vegetation Suburban exotic vegetation 	Number 62 (M = 4.38, SD = 1.8

Focus Group Two Comments Photos and Rating Values

* Positive and negative attributes identified from comments expressed in Focus Group Two. ** Mean and standard deviation values are based on a 7 point, bi-polar character compatibility rating scale used during the photo rating exercise (N=34) where 1 = highest degree of perceived compatibility with neighbourhood character and 7 = lowest compatibility with neighbourhood character and 4 = neutral.

 ♥ Articulation ♥ Door of garage ♥ Pebble driveway 	 Inconsistent roof form Overworked design – middle house Large area of paving High solid front fence 	Number 65 (M = 4.70, SD = 1.70)
 Outdoor living Built to maximise views Balconies articulate form Colours ok 	 Height Exposed Minimal vegetation and siting Corner lot No landscape treatment at front or sides Minimal setback Building bulk High footprint Dominance of concrete 	Number 45 (M = 4.74, SD = 1.76)
 Interesting colours Use of materials in fencing and balconies Underground power 	 Scale Dominance of driveway and garage Bulk and site coverage Boundary to boundary construction No landscaping and no potential for 	Number 13 (M = 4.85, SD = 1.99)
 ♥ Neutral colours ♥ Interesting/creative design ♥ Setbacks 	 High front fence – lacks integration Unfriendly Not responsive to environment Windows out of scale 	Number 66 (M = 4.94, SD = 1.62)
 Some indigenous plants Small balconies break up facade Window scale No front fence Roof form reflects old beach shack Colours not offensive 	 Repetition and uniformity Minimal setbacks Lack of landscaping Domination of paving Does not respond to environment or orientation Lot size too small for bulk and scale of building 	Number 20 (M = 5.12, SD = 1.72)
 Some of the elevations more integrated Attempt at picking up on beach style – not all positive 	 Too imposing from this elevation No landscaping and limited potential for Site coverage high 	Number 35 (M = 5.41, SD = 1.73)

 No driveway or garages facing street Area for landscaping 	 Landscaping not planted appropriately Suburban style Colours don't match style Fence out of scale Columns too heavy High site coverage Minimal setbacks Repetitive form Inadequate articulation Front wall placement
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Neighbourhood Two		
Positive Attribute	Negative Attribute	Photographs / Rating Values
 Landscape – canopy trees, vegetation surrounding building and native species Balanced development Simplistic, humble, understated Single storey, small footprint Generous front and side setbacks Fence in balance 		Number 1 (M = 1.97, SD = 0.72)
 View to ocean Tree lined Building set below view line Wide road, on street parking No footpaths 	 Small street trees Overhead powerlines 	Number 9 (M = 1.97, SD = 1.14)
 Nestled into landscape Beach style shack Subtle extension Low, open front fence Windows are feature of style and era 	 Colours are strong but still ok due to modest style 	Number 72 (M = 2.53, SD = 1.42)
 Roofline broken up by mature canopy trees Smaller scale Endearingly rundown Humble and understated 		Number 3 (M = 2.97, SD = 1.40)

 Low key, humble quality Generous side setbacks Mature vegetation and mostly landscaped No fence Colour reflective of area No footpath Single storey scale Shallow pitched roof Driveway not sealed 		Number 47(M = 3.00, S.D = 1.58)
 Attempt at different design Indigenous mature trees retained Well designed for orientation and environment Presents as one house to street 	 Density too high Lack of eaves and articulation Lack of carparking Obstruction of views 	Number 42 (M = 4.09, SD = 1.76)
 Houses slightly different in form and colour to add more interest Roofing not offensive but not distinctive 	 Lack of established trees – many removed Driveway dominates High pavement coverage Repetition Overdevelopment of site Boxy Decks look 'tacked' on High density makes servicing difficult Impact on privacy 	Number10 (M = 4.94, SD = 1.92)

Neighbourhood Three		
Positive Attribute	Negative Attribute	Photographs / Rating Values
 Sentiment, nostalgic Historic value Association with old Torquay Classic low maintenance garden Large setbacks Native vegetation Tree lined path Bell tower attractive Classic 'Australian' style Material and structure Unobtrusive colours and materials Windows provide interest Unique values 		Windowski Windowski Number 25 (M = 1.32, SD = 0.59)

 Historic value (old butcher shop) Remnant from 1913 bushfires Balanced – doesn't dominate street Large nature strips Small scale Classic 'Australian' form 		Number 41 (M = 1.82, SD = 1.03)
 Historic value Large gum trees Open and large yard Building is in proportion to lot size Informality of yard Flexible and utilitarian spaces around house Not imposing Interesting and curious forms – eg windows 		Windowski (M = 2.03, SD = 1.24)
 View to ocean provides connection Community image Tree lined street Single storey/low scale building Generous road width 		Number 16 (M = 2.29, SD = 1.43)
 Wide verandahs Single storey Large windows and French doors present well to street Layering of vegetation softens development 		Number 29 (M = 2.29, SD = 1.24)
 Wide nature strips with indigenous vegetation House nestled into site Materials reflective of older era Subtle driveway treatment 	▲ Fence ok but not a feature	Number 58 (M = 2.32, SD = 1.36)
 Historical value Nostalgic Reflective of original Torquay in size, form and materials Australian cottage style Very original 		Number49 (M = 3.00, SD = 1.83)

 Lightweight materials muted and good mix Not two storey at front Well articulated Good interpretation of beach shack Good window proportions 	 High front fence on concrete footpath Established trees needed 	Number 70 (M = 3.79, SD = 1.76)
 Façade is well balanced and not offensive 	 Colours too pastel Proportionally presents as three storey Repetitive form Bulky garages Black walls Small scale landscape not adequate for size of building Overdevelopment 	Example 1 For the second sec
	 Imposing wall and fence Density – overdevelopment Sheer, flat, two storey walls No verandahs Lack of landscaping and established trees 	Number 55 (M = 4.26, SD = 1.85)
 Suits neighbourhood character Good articulation Shallow roof pitch 	 Building dominates site Very limited landscaping 'Fortress' and unfriendly façade – doesn't address street 	Number 33 (M = 4.45, SD = 1.99)
 Mural on wall helps to blend in 		Number 24 (M = 4.47, SD = 1.90)
	 Opportunity for landscaping that hasn't been obliged Unfinished 	Number 68 (M = 4.62, SD = 1.74)

 ♥ Unobtrusive ♥ Low maintenance 	 Suburban Minimal landscaping Brick veneer and inappropriate colour Concrete cover too high 	Number 44 (M = 4.76, SD = 1.92)
 Greenery and terracing softens 	 Comparison to Cumberland Impact on the Esplanade Suburban manicured exotic garden No regard to adjoining properties Three storey element at back 	Number 21 (M = 5.03, SD = 1.82)
 Proportions more considered and balanced Fence in scale and provides privacy in part Open space provides balance – suitable in its context 	 Height Queensland style Aesthetics not suited to Torquay Could be more articulated Staggered from front 	Number 38 (M = 5.24, SD = 1.96)
	 Boxy Not site responsive No articulation Flat roof Blank walls Suburban in all respects, including fence Mimic Inappropriate exotic landscaping No canopy trees Repetition 	Number 4 (M = 5.62, SD = 1.62)
	 Colour too overwhelming Signage – inappropriate advertising High exposure 	Number 40 (M = 6.00, SD = 1.30)

Neighbourhood Four		
Positive Attribute	Negative Attribute	Photographs / Rating Values
 Vegetation along boundaries and in front yard Appropriate, classic beach shack – roof, materials, landscaping Small single driveway Colours not offensive 		Number 61 (M = 2.52, SD = 1.23)
♥ Weatherboard	 Tiles inappropriate Out of character due to height, emphasised features and forms Sits above tree line Overly manicured landscape 	Number 64 (M = 4.06, SD = 1.92)
 Colour makes it recede Reasonable setback Forms ok Roofline positive 	 Minimal vegetation 	Number 69 (M = 4.06, SD = 1.90)
 ♥ Simple forms ♥ Subtle colours ♥ One generous side setback 	 Lack of address to street Not residential in form Neglected street and landscape 	Number 60 (M = 4.12, SD = 1.43)
 Less offensive due to location Lack of development around 	 Colours Strong visual structures Lack of landscaping Poor orientation Mismatch of materials 	Number 36 (M = 4.79, SD = 1.53)
	 Flat roof No eaves or verandahs Bare, blank facade Urban style – bulk, scale Landscaping not in character 	Number 73 (M = 5.06, SD = 1.65)

 More innovative 	 Lack of landscaping Form makes large impact on street Large scale – building to lot size Aggressive colours and forms 	Number 37 (M = 5.21, SD = 1.74)
 Good setbacks Wall materials Garage at rear 	 Dallas/wedding cake quality Vegetation not to scale Roof materials Too busy – rooflines competing Not site responsive 	Number 71 (M = 5.24, SD = 1.83)
 ♥ Buildings on poles ♥ Reflective of Jan Juc 	 Houses competing with one another Scale and exposure No landscaping 	Number 15 (M = 5.32, SD = 1.74)
	 Lack of landscaping Appears as 'Lego Land' Fully constructed Scar on landscape Subdivision should have allowed for green belts and breaks 	Number 27 (M = 5.74, SD = 1.62)

Neighbourhood Five		
Positive Attribute	Negative Attribute	Photographs / Rating Values
 Materials – rustic and natural Blends in to vegetation Eccentric architecture Does not impose Natural driveway 		Number 78 (M = 2.71, SD = 1.40)
 Materials and colours not offensive 	 Not suited to Victorian coast Queenslander Lack of vegetation in scale 	Number 81 (M = 3.58, SD = 1.97)

 Native vegetation at front Planted nature strip, extensive planting in context with area Use of colours Interesting roof form Outdoor entertaining areas 	 Large scale Will appear overdeveloped when adjoining blocks developed 	Number 46 (M = 3.74, SD = 1.83)
♥ Subtle colours♥ Form ok	 Lack of articulation of facade Harsh, dominating fence Too close to street Minimal setbacks Height on side boundaries No frontage vegetation 	Number 75 (M = 4.06, SD = 1.64)
 Good fence material Skillion roof on garage 	 Barren Harsh horizontals and verticals High front fence Dominance of garage Lack of vegetation Curve roof doesn't work with garage roof 	Number 74 (M = 4.15, SD = 1.52)
 Large block Large setbacks Large green areas 	 Bulk, scale Windows not balanced or consistent 	Number 80 (M = 4.41, SD = 1.83)
♥ Muted colours	 Inappropriate fencing Doesn't address both streets adequately Touch of suburban Too formal for area Deck protruding Boxy 	Number 82 (M = 4.41, SD = 1.96)
 Lightweight material Simple forms Interesting development 	 Colour could be improved Lack of landscaping Dominance of garage and vehicle focus 	Number 76 (M = 4.56, SD = 1.52)

 Colours and materials Single garage – not double 	 Wall to wall development Over constructed Windows too small Front fence too high Lack of landscaping Minimal setbacks Boxy Aggressive – little integration with the street 	Number 79 (M = 4.91, SD = 1.62)
 Dark roof minimises impact 	 Fortress like Big and imposing Lack of landscaping Too much brick Too vertical Lack of balance Doesn't fit landscape 	Number 83 (M = 5.03, SD = 1.70)
	 Urban Boxy Minimal landscaping Tile roof too heavy Shear blank walls Repetitive Over exaggerated columns Minimal setbacks Imposing 	Number 77 (M = 5.59, SD = 1.74)

Neighbourhood Six		
Positive Attribute	Negative Attribute	Photographs / Rating Values
 Classic Jan Juc Low scale – not imposing Nestled in trees Not overpowering Weathered with landscape See through/transparency Not imposing 		Number 11 (M = 1.97, SD = 1.22)
 Classic beach shack – timber, skillion roof Nestled in mature vegetation Subtle colours and materials 		Number 63 (M = 2.32, SD = 1.39)

 Classic Jan Juc Nestled in trees Lightweight Colours keep in style 		Number 8 (M = 2.56, SD = 1.48)
 Surf style Large lot with space around building Retained native vegetation Interesting architecture Site responsive 	 Could have more landscaping – more regeneration Harsh roof lines and colours 	Number 57 (M = 3.29, SD = 1.61)
 Excellent landscaping Windows sited to respond to interior and exterior Subtle colours and materials Windows split bulk of upper level Ground floor recedes Individuality 		Number 54 (M = 4.65, SD = 1.82)
 ♥ Social character due to location ♥ Colours ok 	 Not aesthetically pleasing Concrete abutting road Lack of landscaping 	EXAMPLE 1 Number 31 (M = 5.15, SD = 1.60)
	 Intrusive building Scale/mass Inadequate landscaping Urban form Height 	Number 22 (M = 5.24, SD = 1.71)
	 Boxy Flat roof Concrete coverage Minimal setbacks 	Number 5 (M = 5.24, SD = 1.81)

Appendix F

Focus Group Two: Aggregate Content Analysis Results

In this appendix comments about development and the attributes that contribute to the character compatibility (and incompatibility) of developments, as presented in the tables in Appendix E, were content analysed and ordered from most to least in terms of frequency of mention.

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Attributes associated with compatibility of development with local character

Attribute	Frequency of Mention
Colours - dark colours that reduces prominence,	21
interesting, neutral, not offensive reflective of	
area, unobtrusive, receding, subtle, muted, dark	
roof, subtle, lightweight	
Indigenous vegetation	14
Sentiment, nostalgic, historic value, old	14
Torquay, Classic 'Australian' style, surf style	
Materials, stone reflective of area,	13
weatherboard, rustic and natural, lightweight,	
timber	
Larger setbacks	13
Landscaping adequate	12
Unobtrusive, not imposing, humble and	12
understated, low key	
Roof form reflects old beach shack, shallow	9
pitched, Skillion	
Mature Trees, Mature vegetation	9
Unique Design, innovative	8
Balanced design	6
Interesting/creative design	5
Building set below tree line	4
Roofline, broken up by mature canopy trees,	4
gables, peaks	
Small in scale	4
Large block	4
Good articulation	4
Solar orientation	4
Built to maximize views, Views to ocean	4
Beachy – bathing box, style of house	3
Low maintenance	3
No fences, front	3
Simple design, forms	3
Large setbacks	3
Small footprint	3
Driveway, pebble, natural, small	3
Low density	2
Not too tall – single storey	2
Houses different in form and colour – moderate	2
complexity	-
Fence in scale, good design	2
Balconies articulate form	2
Single garage	2
Wide road, No footpaths	2
Transparency	2
	2

Attributes associated with incompatibility of development with local character

Attribute	Frequency of Mention
Landscaping inadequate, lack of, out of scale	33
Domination of building - Too imposing, too big,	20
Fortress- like, unfriendly Looking	
Concrete / Asphalt - Dominance of concrete –	18
driveways to much	
High site coverage	17
Building bulky and Boxy	17
Minimal setback – side, front or back boundaries	16
Front fence - High solid, too big, lacking	11
integration	
Colours – Contrasting, not matching,	11
overwhelming, strong, too pastel, black in walls,	
aggressive, harsh	
Suburban looking	10
Building does not fit with street and adjoining lots	10
Front wall – large, flat, imposing	10
Lack of mature trees	9
No indigenous vegetation, vegetation cleared	8
from site	
Height – Too high, three storey	7
Scale - large	7
Not responsive to environment	7
Lack of articulation	6
Roof materials, tiles, forms	6
Not reflective of area, No local connection	6
Suburban exotic vegetation and poor planting	6
design	
Small lot – too small	5
Density too high	5
Windows out of scale	4
Repetition and uniformity of forms	4
Proportions of building form incorrect	3
Siting inappropriate, Not site responsive	3
No verandahs	3
Urban looking	3
Too vertical	3
Flat roofs	3
Dominance of garage	3
Overly manicured garden and lawn	3
Lawn	2
Brick veneer	2
Commercial/ resort style	2
Looks to have been added	2
Too complex in form	2
Lack of eaves	2
Obstruction of views	2
Queensland style houses	2
Inappropriate signage –	2
Roof visible above tree line	2

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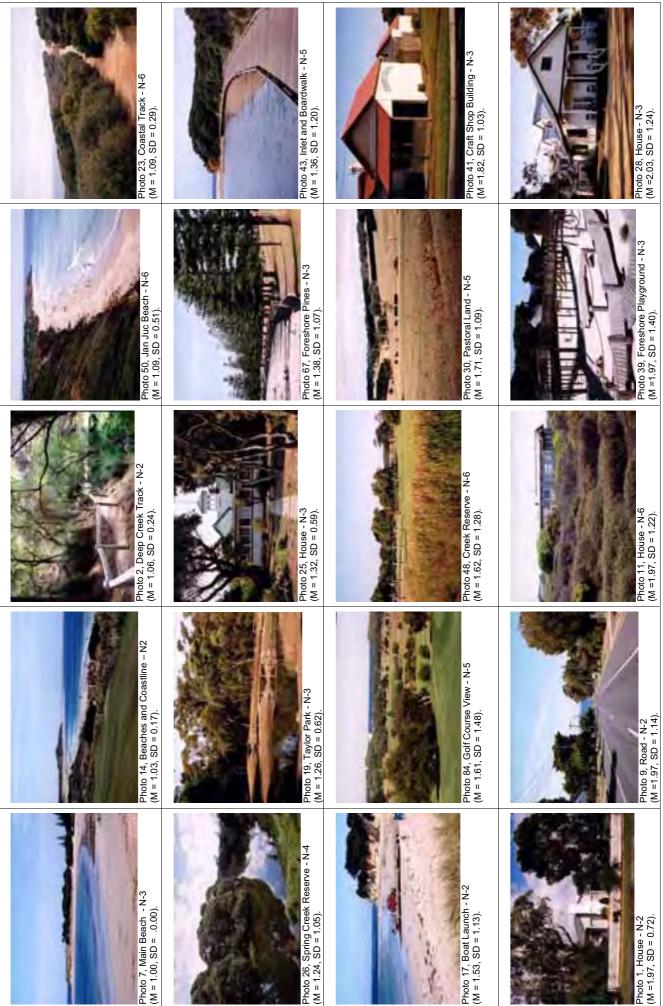
Appendix G

Photo Rating Exercise: Neighbourhood Features Rated by Character Compatibility from Most to Least Compatible

The photographs displayed in the following A3 sheets illustrate all features used as stimuli in the photo rating exercise. Mean and standard deviation values reflecting aggregate perceived neighbourhood character compatibility ratings derived from the community workshop photo rating exercise are also given.

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Neighbourhood Features Rated by Character Compatibility From Most to Least Compatible (Continued).



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Photo 63, House - N-6 (M = 2.32, SD = 1.39). Photo 58, House - N-3 (M = 2.32, SD = 1.37). Photo 29, House - N-3 (M = 2.29, SD = 1.24). Photo 16, Street - N-3 (M = 2.29, SD = 1.43). Photo 34, Sun Dial - N-2 (M = 2.12, SD = 1.43).



1

Neighbourhood Features Rated by Character Compatibility From Most to Least Compatible (Continued).



Neighbourhood Features Rated by Character Compatibility From Most to Least Compatible (Continued).

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Neighbourhood Features Rated by Character Compatibility From Most to Least Compatible (Continued).



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Appendix 2

Copy of "Torquay/Jan Juc Neighbourhood Character Study - Vegetation Report" (Mark Trengove, October 2003)

Torquay - Jan Juc

Neighbourhood Character Study

Vegetation Report

prepared by Mark Trengove*

prepared for the Surf Coast Shire

December 2003

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End

*PO Box 1502 Geelong 3220 INTRODUCTION The Surfcoast Shire is undertaking a Neighbourhood Character Study for the residential areas of Torquay and Jan Juc. This Vegetation Report was commissioned as a component of that study. The report provides the following information-

- Mapping and description of the extant indigenous vegetation communities
- Assessment of the quality and significance of those vegetation communities
- Broad management guidelines for those vegetation communities
- Mapping and description of any culturally, visually or biologically significant areas of exotic vegetation.

This report was first presented in draft form in February of this year as a component of the community consultation process. This final version includes additional information and comments that were gathered during consultation.

In addition to the above, photographs were provided of examples of the vegetation communities to inform the public participation component of the Study.

METHODS

Vegetation data collection, mapping and photography was undertaken on the 12th and 13th of February. Data collected included vegetation community data (dominant species) and vegetation quality (ie degree of intactness). All vegetation mapping data was collected utilizing Global Positioning System technology. Notes were made recording vegetation quality, vegetation management methods, and significant species. Records were also made detailing areas of exotic vegetation which exhibited potential cultural, visual or biological values.

RESULTS

A total of eight indigenous vegetation communities were recorded within the study area. These vegetation communities are described below. The quality of the vegetation communities varied considerably, often in relation to land use and tenure.

These communities were rated for quality utilizing a five point rating, 1 being the least intact (least significant) to 5 being the most intact (most significant). These variations in vegetation quality and land tenure are described as vegetation units. The vegetation units and quality ratings are given below in Table 1. The corresponding Ecological Vegetation Class (EVC) is given for each vegetation unit.

In addition to the above large areas of predominately non-indigenous (exotic and nonindigenous native) vegetation were recorded.

Notes are provided below on the description, distribution and significance of each vegetation unit. The location and distribution of these vegetation units is provided in Map 1.

Significance

Vegetation Communities are assessed in terms of their significance for flora conservation. Typically Communities are described as being significant on a National, State, Regional or Local level. This significance is determined by assessing current conservation status. State or regional significant communities are those which are relatively intact (high quality),rare, uncommon or of limited distribution, or those which contains plant species which are taxonomically, biogeographically or ecologically rare or interesting, or those which are not regenerating in sufficient numbers to maintain healthy population numbers.

VEGETATION COMMUNITIES

Messmate Stringybark Woodland

Community Description

Open woodland dominated by Messmate Stringybark (*Eucalyptus obliqua*) with scattered occurrences of other Gums, ie Manna Gum (*Eucalyptus viminalis*), Swamp Gum (*Eucalyptus ovata*) and Narrow -leaf Peppermint (*Eucalyptus radiata*). The understorey is dominated by a range of small heathland shrubs, such as Sweet Wattle (*Acacia suaveolens*) with Grass-trees (*Xanthorrhoea australis, X. minor*) and grasses, sedges and herbaceous species.

EVC

This community is described as EVC 48 "Heathy Woodland" (RFA 2000).

Distribution

Located at the Bells Boulevard/Bones Rd area to the south of the study area and at the Messmate Rd area where it occurs on nutrient poor soils. Two vegetation units were recorded. Was probably more widespread prior to European arrival

Significance

Both examples of this community, Bells Boulevard/Bones Rd (Vegetation Unit # 16) and Messmate Rd (#9) are relatively intact, and are of High Regional Significance, rated 4.

Unit Description

Bells Boulevard/Bones Rd (Vegetation Unit # 16)

Mostly intact vegetation dominated by Messmate with occasional Ironbark and Black Sheoke (*Allocasuarina littoralis*). Intact understorey dominated by heathy vegetation. Most dominant environmental weed is Bluebell Creeper (*Sollya heterophylla*).

Messmate Rd/Coombes Rd/Grossmans Rd (#9)

Mostly intact vegetation dominated by Messmate, areas of relatively intact understorey.

Ironbark Woodland

Community Description

Open woodland dominated by Ironbark (*Eucalyptus tricarpa*) with scattered occurrences of other Gums, ie Messmate Stringybark and Bellarine Yellow Gum (*Eucalyptus leucoxylon ssp bellarinensis*). This vegetation has relatively limited distribution in the Geelong/Otway region. The understorey is dominated by a range of shrubs with some grasses, sedges and herbaceous species.

EVC

This community is described as EVC 21 "Shrubby Dry Forest" (RFA 2000).

Distribution

Confined to the south west parts of the study area where it occurs in gullies (above the Bellarine Yellow Gum Woodland) and on higher ground near Woodbank Rise. Three vegetation units were recorded. Was probably more widespread prior to European arrival.

Significance

All three occurrences of this community at Bells Boulevard North (#12), Bells Boulevard/Toad Hall (#14) and Bells Boulevard/Sunset Strip (#17) are relatively intact and are of High Regional Significance and are rated 4.

Unit Descriptions

Bells Boulevard North (#12)

Mostly intact vegetation dominated by Messmate Ironbark with occasional Messmate and Bellarine Yellow Gum. Intact understorey dominated by heathy vegetation. Most dominant environmental weed is Bluebell Creeper.

Bells Boulevard/Toad Hall (#14)

Mostly intact vegetation dominated by Messmate Ironbark with occasional Messmate and Bellarine Yellow Gum. Intact understorey dominated by heathy vegetation. Most dominant environmental weed is Bluebell Creeper.

Bells Boulevard/Sunset Strip (#17)

Mostly intact vegetation dominated by Messmate Ironbark with occasional Messmate and Black Sheoke. Intact understorey dominated by heathy vegetation. Most dominant environmental weed is Bluebell Creeper.

Bellarine Yellow Gum Woodland

Community Description

Open woodland dominated by Bellarine Yellow Gum with scattered occurrences of other

Gums, such as Manna Gum (*Eucalyptus viminalis*) and Ironbark, Moonah and Drooping Sheoke (*Allocasuarina verticillata*). The understorey is mostly open and dominated by a range of shrubs with some grasses, sedges and herbaceous species. Was probably more widespread prior to European arrival.

EVC

This community is described as EVC 175 Grassy Woodland (RFA 2000).

Distribution

The most intact examples of this community are the Jan Juc populations to the west of Domain Road, south of Strathmore Drive and east of Bells Boulevard. Relatively intact examples occur at Spring Creek, Deep Creek and a relative large population occurs at Duffields Road. The less intact Torquay populations are located in central Torquay.

It is worth noting that other occurrences of Bellarine Yellow Gum occur outside the study area, west of Duffields Road and at Bells Beach.

Significance

This vegetation has very limited distribution in Victoria where it is found on the Bellarine Peninsula and in the Torquay/Jan Juc area. The Bellarine Yellow Gum is listed as protected species on the Victorian Flora and Fauna Guarantee Act (1988). A previous study (Trengove 2001) estimated that there were approximately 4800 trees extant within the Surf Coast Shire populations.

The Jan Juc populations are Jan Juc Central (#18), South of Strathmore Drive (#13), Duffields Road (#21) and Toadhall Lane (#15). Sites 13 and 15 include some areas of relatively intact understorey while sites 13 and 21 consist of relatively large populations. All these site are of State Conservation Significance and are rated 5.

The Torquay populations are Spring Creek Upper (#31), Torquay Central (#3) and Deep Creek Upper (#8). Spring Creek Upper includes a relatively large population with some areas of relatively intact understorey. This population is of State Conservation Significance and is rated 5. Deep Creek Upper includes a relatively large population with some areas of relatively intact understorey and is of State Conservation Significance, rated 5. Torquay Central consists of more scattered trees with less intact understoreys and is of High Regional Significance, rated 4.

Unit Descriptions

Jan Juc Central (#18)

Mosaic of stands and individual trees of Bellarine Yellow Gum and Manna Gum with areas of non-indigenous natives and exotics. Understorey mostly modified, with some remnant

understorey in Sunset Strip and Ocean Boulevard. Includes mature and juvenile Bellarine Yellow Gums.

South of Strathmore Drive (#13)

Mosaic of stands and individual trees of Bellarine Yellow Gum and Ironbark with areas of non-indigenous natives and exotics. Some remnant understorey. Includes mature and juvenile Bellarine Yellow Gums.

Toadhall Lane (#15)

Mosaic of stands and individual trees of Bellarine Yellow Gum and Ironbark with areas of non-indigenous natives and exotics. Some remnant understorey including Wallaby-grass (*Austrodanthonia sp*),Spear-grass (*Austrostipa sp*), Black-anther Flax-lily (*Dianella admixta*) and Slender Tussock-grass (*Poa sieberiana*). Includes mature and juvenile Bellarine Yellow Gums.

Duffields Rd (#21)

A mixture of approximately 200 mature and juvenile Bellarine Yellow Gums. Some remnant understorey including Kangaroo Grass (*Themeda triandra*), Slender Tussock-grass, Wallaby-grass, Sweet Bursaria, Golden Wattle and Hedge Wattle.

Spring Creek Upper (#31)

Mosaic of stands and individual trees of approximately 300 Bellarine Yellow Gum and Moonah. Some remnant understorey including Varnish Wattle (*Acacia verniciflua*), Coast Tussock-grass (*Poa poiformis*), Bower Spinach (*Tetragonia implexicoma*) and Sea-berry Saltbush (*Rhagodia candolleana*).

Torquay Central (#3)

Scattered trees with mostly exotic understoreys and plantings of exotic and non-indigenous trees and shrubs.

Deep Creek Upper (#8)

Mosaic of stands and isolated individuals of mature and juvenile trees Manna Gums, including some regeneration. Associated trees include Manna Gum, Drooping Sheoke, Silver Banksia (*Banksia marginata*) and Golden Wattle. Understorey species include Kangaroo Grass, Wallaby-grass, Spear-grass, Black-anther Flax-lily and Slender Tussock-grass.

Moonah Coastal Woodland

Community Description

Open to closed woodland or shrubland dominated by Moonah. Associated trees are Drooping Sheoke. Associated shrubs include Boobialla (*Myoporum insulare*) and Coast Rice-flower (*Pimelea serpyllifolia*). The understorey consists of succulent shrubs and

climbers such as Sea-berry Saltbush and Bower Spinach and moss beds. The more inland occurrances of Moonah tend to merge with the Bellarine Yellow Gum, Ironbark and Messmate Stringybark Woodlands. Was probably more widespread prior to European arrival.

EVC

This community is described as EVC 1 Coastal Dune Scrub Mosaic (RFA 2000).

Distribution

Confined to near coastal Torquay between Darian Road and Bell Street, the Moonah Reserves at 'The Sands' and Spring Creek.

Significance

Coastal Moonah Woodlands are a listed vegetation community under Schedule 2 of the State Flora and Fauna Guarantee Act (1988). As such all remnants of this community are of conservation significance.

The Spring Creek Middle (#32) population is relatively intact with a predominately indigenous understorey, it is of State Conservation Significance and is rated 5. Reserves 1 & 2 at "The Sands" (# 22) are relatively intact with a predominately indigenous understorey, and are of State Conservation Significance, rated 5.

The Torquay Coastal (#2) population is scattered with a mostly exotic understorey, it is of Regional Conservation Significance and is rated 3.

Unit Descriptions

Spring Creek Middle (#32)

Relatively intact population that occurs within the upper tidal zone of Spring Creek. Understorey vegetation includes Sea-berry Saltbush, Bower Spinach, Creeping Brookweed (*Samolus repens*) and Beaded Glasswort (*Sarcocornia quinqueflora ssp quinqueflora*). At the upper stream reaches the Moonah merges with Bellarine Yellow Gum.

Reserves 1 & 2 at "The Sands" (# 22)

Relatively intact Moonah woodland vegetation located on rear dune formations. Understorey included populations of the State significant Coast Wirilda (*Acacia retinodes var uncifolia*), Coast Rice-flower, Boobialla and Coast Beard-heath (*Leucopogon parviflorus*).

Torquay Coastal (#2)

Mosaic of stands and individual trees of Moonah, Drooping Sheoke and Boobialla with areas of non-indigenous natives and exotics. Some indigenous understorey remains including Sea-berry Saltbush and Bower Spinach.

Drooping Sheoke Woodland

Description

Open to closed woodland dominated by Drooping Sheoke. Associated trees species include Golden Wattle and Sweet Bursaria. Understorey species include Wallaby-grass, Spear-grass, Weeping Grass (*Microlaena stipoides*), Hop Goodenia (*Goodenia ovata*), Clustered

Sword-sedge (Lepidosperma congestum) and Flax-lily (Dianella spp).

EVC

This community is described as EVC 175 Grassy Woodland (RFA 2000).

Distribution

Confined to the banks of the lower reaches of Deep Creek, upstream of the Esplanade.

Significance

The Deep Creek Lower (#20) population is a relatively intact example of a vegetation community that is now much reduced from the pre-european distribution and is of High Regional Significance, rated 4.

Unit Description

Deep Creek Lower (#20)

Open to closed woodland dominated by Drooping Sheoke. Associated trees species include Golden Wattle and Sweet Bursaria. Understorey species include Wallaby-grass, Spear-grass, Weeping Grass, Hop Goodenia and Flax-lily.

Manna Gum Woodland

Description

Open to closed woodland dominated by Manna Gum. Associated trees species include Drooping Sheoke, Silver Banksia Golden Wattle and Sweet Bursaria. Understorey species include Austral Grass-trees, Guinea Flower (*Hibbertia sp*), Wallaby-grass, Spear-grass, Weeping Grass, Hop Goodenia and Black-anther Flax-lily. The more inland occurrences of Manna Gum tend to merge with the Bellarine Yellow Gum, while the more coastal occurrences tend to merge with Drooping Sheoke.

EVC

This community is described as EVC 55 Plains Grassy Woodland (RFA 2000).

Distribution

Confined to the banks of the middle reaches of Deep Creek.

Significance

The Deep Creek Middle (#19) population is a relatively intact example of a vegetation community that is now much reduced from the pre-european distribution and is of High Regional Significance, rated 4.

Unit Description

Deep Creek Middle (#19)

Open to closed woodland dominated by Manna Gum. Associated trees species include

Drooping Sheoke, Silver Banksia, Golden Wattle and Sweet Bursaria. Understorey species include Austral Grass-tree, Guinea Flower, Wallaby-grass, Spear-grass, Weeping Grass, Hop Goodenia and Black-anther Flax-lily.

Coastal Complex

Description

Consists of a complex of coastal vegetation including -

- Coastal Dune Complex including shrubland and grassland
- Coastal Cliff Shrubland
- Coastal Heathland

EVC

The Coastal Dune Complex and Coastal Cliff Shrubland communities (#23,24,25) are described as EVC 1 Coastal Dune Scrub Mosaic (RFA 2000).

The Coastal Heathland community (#26 and parts of #25) are described as EVC 48 Heathy Woodland (RFA 2000)

Distribution

Confined to the coastal verge of the study area.

Significance

The Coastal Dune Complex (#23) includes areas of relatively intact vegetation, including a population of the State significant Coast Wirilda and is of High Regional Significance, rated 4.

The Coastal Dune/ Coastal Cliff Complex (#24) includes areas of some indigenous vegetation, including some scattered Moonah, and areas of modified and exotic vegetation and is of Regional Conservation Significance, rated 3.

The Coastal Dune/ Coastal Cliff/Coastal Heathland Complex (#25) includes areas of relatively intact indigenous vegetation, including some scattered Moonah, and is of High Regional Conservation Significance, rated 4.

The Coastal Heathland (#26) is an relatively intact example of a vegetation community that has a limited and now reduced distribution within Victoria, and is of State Conservation Significance, rated 5.

Unit Descriptions

Coastal Dune Complex (#23)

Includes areas of relatively intact vegetation, including a population of the State Significant Coast Wirilda. Grassland dominated by Hairy Spinifex (*Spinifex sericeus*) and the exotic Marram Grass (**Ammophila arenaria*) on fore dunes. Open to closed shrubland and

woodland dominated by Coast Tea-tree (*Leptospermum leavigatum*), Coast Beard-heath and Coast Wirilda on rear dunes.

Coastal Dune/ Coastal Cliff Complex (#24)

Includes some areas of indigenous vegetation, including some scattered Moonah, Coast Teatree, Coast Beard-heath and Sea Box (*Alyxia buxifolia*) and areas of modified and exotic vegetation. Includes formal plantings of mature Norfolk Island Pines (*Araucaria heterophylla*) on Torquay front beach.

Coastal Dune/ Coastal Cliff/Coastal Heathland Complex (#25)

Includes areas of relatively intact indigenous Coastal Dune, Coastal Cliff and Coastal Heathland vegetation. Indigenous species include scattered Moonah, Coast Pomaderris (*Pomaderris paniculosa ssp paralia*), Coast Daisy-bush (*Olearia axillaris*) and Cushion Bush (*Leucophyta brownii*).

Coastal Heathland (#26)

Consists of substantially intact and diverse indigenous heathland vegetation. Indigenous species include Dwarf Sheoke (*Allocasuarina misera*), Silver Banksia, White Correa (*Correa alba*), Prickly Tea-tree (*Leptospermum continentale*).

Saltmarsh Complex

Description

Saltmarsh and saline herbfield dominated by low halophytic shrubs and succulents including Beaded Glasswort, Creeping Brookweed, Sea Rush (*Juncus kraussii*), Shiny Bog-rush (*Schoenus nitens*) and Arrow Grass (*Triglochin striatum*).

EVC

This community is described as EVC 52 Coastal Saltmarsh Complex (RFA 2000).

Distribution

Confined to the lower tidal reaches of Spring Creek.

Significance

Spring Creek Lower (#33) consists of areas of relatively intact indigenous vegetation and is of High Regional Conservation Significance, rated 4.

Unit Description

Spring Creek Lower (#33)

Saltmarsh and saline herbfield vegetation dominated by low halophytic shrubs and succulents including Beaded Glasswort, Creeping Brookweed, Sea Rush (*Juncus kraussii*), Shiny Bogrush (*Schoenus nitens*) and Arrow Grass (*Triglochin striatum*). Occurs on mud flats within

the Spring Creek lower tidal estuary.

Exotic and Non-indigenous Native Vegetation

Description

Residential areas, caravan parks and sporting reserves comprised predominately of exotic and/or non-indigenous native vegetation, ie no remnant vegetation. Grazing land consisting of exotic pasture grasses.

Distribution

The majority of the study area is comprised of exotic vegetation and non-indigenous native vegetation. The new Torquay north of Deep Creek, the areas west of the Surf Coast Highway/Great Ocean Road and substantial areas of Jan Juc all contain predominately garden vegetation.

The area south of Spring Creek, west of the Great Ocean Road contains areas of exotic pasture grass.

Significance

Examples of exotic vegetation are sites North of Deep Creek (#1), Grossman Road/Coombes Road (#5,6 &7), Rocklea Drive (#4), Beach Road West (#1), Spring Creek South (#10), Jan Juc (#11), Zeally Bay Caravan Park (#27), Torquay Caravan Park (#28), Torquay Golf Club and Torquay Sports Reserve (#30) [Note that the Bellarine Yellow Gums located along the south-west of this Unit are included in Spring Creek]. These sites are of no conservation significance.

Table 1LOCATION, QUALITY AND SIGNIFICANCE OF VEGETATION UNITS

NAME

QUALITY

SIGNIFICANCE

VEGETATION UNIT/MAP REFERENCE #

Mark Trengove

December 2003

Messmate Stringybark Woodland			
Bells Boulevard/Bones Rd	4	High Regional	16
Messmate Rd/Coombes Rd	4	High Regional	9
Ironbark Woodland			
Bells Boulevard North	4	High Regional	12
Bells Boulevard/Toadhall	4	High Regional	12
Bells Boulevard/Sunset Strip	4	High Regional	17
	•		- /
Bellarine Yellow Gum Woodland			
Jan Juc Central	5	State	18
South of Strathmore Drive	5	State	13
Toadhall Lane	5	State	15
Duffields Road	5	State	21
Spring Creek Upper	5	State	31
Torquay Central	4	High Regional	3
Deep Creek Upper	5	State	8
beep creek opper	0	State	0
Moonah Coastal Woodland			
Torquay Coastal	3	Regional	2
Reserves 1 & 2 - The Sands	5	State	22
Spring Creek Middle	5	State	32
spring creek initiale	U		52
Drooping Sheoke Woodland			
Deep Creek Lower	4	High Regional	20
Manna Gum Woodland			
Deep Creek Middle	4	High Regional	19
•		0 0	
Coastal Complex			
Dune Complex (Whites Beach)	4	High Regional	23
Cliff/Dune Complex (Torquay	3	Regional	24
Dune/Cliff/Heathland Complex (Jan Juc)	4	High Regional	25
Heathland Complex (Bells)	5	State	26
~ · · · · ·			
Saltmarsh Complex			
Spring Creek Lower	4	High Regional	33
Exotic and Non-indigenous Native Vegeta			
Grossman Road South	0	Nil	5
Grossman Road North	0	Nil	6
Coombes Rd	0	Nil	7
Rocklea Drive	0	Nil	4
Beach Road West	0	Nil	1
Spring Creek South	0	Nil	10

December 2003

Jan Juc	0	Nil	11
Zeally Bay Caravan Park	0	Nil	27
Torquay Caravan Park	0	Nil	28
Torquay Golf Club	0	Nil	29
Torquay Sports Reserve	0	Nil	30

QUALITY

- 0- Substantially exotic or non-indigenous native
- 1- Isolated indigenous trees, substantially exotic understorey
- 2- Scattered indigenous trees, substantially exotic understorey
- 3- Scattered indigenous trees, relatively intact understorey/Relatively intact indigenous tree canopy, substantially exotic understorey
- 4- Scattered areas of relatively intact vegetation/substantial areas of relatively intact vegetation with localized disturbance
- 5- Substantial areas of relatively intact vegetation/substantial population of significant species (ie Bellarine Yellow Gum).

MANAGEMENT GUIDELINES

Discussion

In 'natural' or pre-european conditions, vegetation communities such as those present in the study area were subjected to disturbance regimes. These disturbance regimes typically included fire and grazing. Over time the vegetation has adapted to, and become dependent

upon, disturbance regimes. Given the current altered conditions it is not always possible or desirable to replicate the pre-european conditions, however it is often the case that some type of vegetation management is required to maintain biodiversity values. In general terms the most important vegetation management requirements are to

- Provide an appropriate disturbance regime (ie biomass reduction) to maintain biodiversity values
- Limit inappropriate activities or disturbances that lead to either an immediate or ongoing threat to biodiversity values.

Within the study area the most intact vegetation is located within the south western area of Jan Juc, while the majority of remnant vegetation in Torquay tends to be scattered remnants of trees with out intact understorey. Consequently the aim of maintaining intact natural ecosystems is more achievable in Jan Juc, while the achievable aims at Torquay are more realistically retention and revegetation.

Biomass Reduction

The type and frequency of biomass reduction (usually fire) requirements varies between vegetation communities. In some communities (ie Heathlands) research has been undertaken to determine appropriate regimes, while in others (ie Moonah Woodlands) less is known. In addition the requirements for biomass reduction may vary depending upon the specific management aims (such as ground flora diversity or habitat protection) or constraints (such as proximity of housing or sensitivity to erosion). While it is not known exactly what the pre-european fire frequency was in Moonah Woodlands, it now appears that current biodiversity values are being maintained without fire, consequently it may be appropriate to limit fire in that community.

Broad management guidelines and recommendations are provided below for areas of remnant indigenous vegetation. These are presented in four groupings, ie 1- General Guidelines, 2- Vegetation Community Specific Guidelines, 3- Land Tenure Specific Guidelines and 4- Vegetation clearance issues (potential sub-divisions, additional dwelling etc) on Private Property.

General Guidelines

- Retain existing remnant vegetation wherever possible
- Manage remnant vegetation to maintain and enhance biodiversity values where ever possible
- Limit activities that are likely to cause direct loss or degradation to biodiversity values
- In conjunction with the community, develop appropriate guidelines for managing

remnant vegetation

Vegetation Community Specific Guidelines

Bellarine Yellow Gum Woodland

Data, including the location, quantities, land tenure, canopy health and ages of all Bellarine Yellow Gums is provided the report "Bellarine Yellow Gums in the Surfcoast Shire" (Trengove 2001).

- Limit disturbance to the ground layer
- Limit the movement and introduction of foreign soils or other matters
- Remove environmental weeds
- Where appropriate implement and appropriate ground layer biomass reduction regime
- Retain all existing trees
- Monitor existing trees for canopy health
- encourage revegetation
- encourage regeneration

Messmate Stringybark Woodland

- Limit disturbance to the ground layer
- Limit the movement and introduction of foreign soils or other matters
- Remove environmental weeds
- Where appropriate implement and appropriate ground layer biomass reduction regime (ie fire at approximately 7-10 year intervals)
- Retain existing trees, in particular any that are hollow bearing

Ironbark Woodland

- Limit disturbance to the ground layer
- Limit the movement and introduction of foreign soils or other matters
- Remove environmental weeds
- Where appropriate implement and appropriate ground layer biomass reduction regime (ie fire at approximately 7-10 year intervals)
- Retain existing trees, in particular any that are hollow bearing

Moonah Coastal Woodland

- Limit disturbance to the ground layer, especially disturbance to moss beds by humans and domestic animals
- Limit the movement and introduction of foreign soils or other matters
- Remove environmental weeds
- Limit biomass reduction (burning)

Land Tenure Specific Guidelines

Private Property

- Encourage land holders to remove known or potential environmental weeds
- Encourage land holders to plant indigenous species
- Limit activities that will have direct impact on biodiversity values to areas that are already degraded, such activities include building, car parking and intense recreation
- Limit activities that are likely to cause longer term disturbance and degradation, such activities include altered hydrological regimes (ie storm water run-off) and increased nutrient regimes (ie garden fertilizer run-off)
- Encourage land holders to adopt horticultural practices that are not overly reliant upon fertilizers and pesticides and the introduction of foreign soil
- Encourage land holders to strike an appropriate balance between 'tidying up' areas of remnant vegetation for fire protection purposes and preserving and promoting indigenous vegetation
- Educate land holders about the benefits of living in a semi natural area.

Appendix 1 Torquay -Jan Juc Photographs

1	Fisher St	Eucalyptus viminalis- Manna Gum
2	Fisher St	Bursaria spinosa- Sweet Bursaria
3	Felix Cres	Allocasuarina verticillata- Drooping Sheoke

4	Felix Cres	Phoenix canariensis- Phoenix Palm
5	Taylor Park	Eucalyptus cladocalyx- Sugar Gum
6	Pearl St	Melaleuca lanceolata- Moonah
7	Pearl St	Melaleuca lanceolata- Moonah
8	Torquay Foreshore	Cupressus macrocarpus- Monterey Cypress
9	Torquay Foreshore	Araucaria heterophylla- Norfolk Island Pine
10	Torquay Foreshore	Melaleuca lanceolata- Moonah
11	Torquay Foreshore	Leptospermum laevigatum- Coast Tea-tree
12	Torquay Foreshore	Leptospermum laevigatum- Coast Tea-tree
13	Spring Creek	<i>Eucalyptus leucoxylon ssp bellarinensis</i> - Bellarine Yellow Gum
14	Spring Creek	<i>Eucalyptus leucoxylon ssp bellarinensis</i> - Bellarine Yellow Gum
15	Spring Creek	Melaleuca lanceolata -Moonah
16	Jan Juc Foreshore	Coastal Shrubland
17	Sunset Strip	<i>Eucalyptus leucoxylon ssp bellarinensis</i> - Bellarine Yellow Gum
18	Sunset Strip	<i>Eucalyptus leucoxylon ssp bellarinensis</i> - Bellarine Yellow Gum
19	Sunset Strip	<i>Eucalyptus leucoxylon ssp bellarinensis</i> - Bellarine Yellow Gum
20	Ocean Bvde	<i>Eucalyptus leucoxylon ssp bellarinensis</i> - Bellarine Yellow Gum
21	Ocean Bvde	<i>Eucalyptus leucoxylon ssp bellarinensis -</i> Bellarine Yellow Gum
22	Woodbank Rise	Eucalyptus tricarpa -Ironbark
23	Woodbank Rise	Eucalyptus obliqua -Messmate Stringybark
24	Bells Bvde	Sollya heterophylla -Blue bell Creeper invading Ironbark Woodland
25	Bells Bvde	Sollya heterophylla -Blue bell Creeper invading Ironbark Woodland

26	Ozan Cres	"native" style garden, including exotics, natives and indigenous sp
27	Kenvara Cres	Exotic garden
28	Kenvara Cres	Indigenous garden

REFERENCES

Regional Forest Agreement Steering Committee. - *West Victoria Comprehensive Regional Agreement- Biodiversity Assessment* DNRE Melbourne 2000.

Trengove, M.- *Bellarine Yellow Gums in the Surfcoast Shire* Surfcoast Shire 2001, Unpublished.

Appendix 3

Copy of 'Indigenous Planting Guide' (Surf Coast Shire, 2003)





Prior to European settlement, the main residential area of Torquay was open grassy woodland, comprising Coastal Manna Gums, Drooping Sheoke and Black Wattle, with Grass Trees, Common Heath, and Kangaroo, Wallaby and Spear Grasses making up the ground layer. The occasional Golden Wattle and Sweet Bursaria contributed to the sparse shrub layer.

Today, isolated communities of Yellow Gum Woodland are unique to this precinct and are classified as being of State significance. Pockets of Ironbark Woodland can be found in gullies west towards Jan Juc. The more common Heathy Woodland vegetation, such as that found in the north west of the precinct, consists of Messmate and Brown Stringybark with a shrub layer of Silver Banksia, Sweet Wattle, Common Flat-pea, Common Heath, Honey-pots, Prickly Teatree, Common Beard Heath and Myrtle Wattle. The ground layer comprises a diversity of sedges, rushes, grasses and wildflowers.

The narrow coastal strip supports segments of remnant native vegetation known as "coastal headland scrub" and "coastal dune mosaic", which is relatively treeless with a dense or patchy shrub layer of Moonah, Wirilda, Silver Banksia, Prickly Tea-tree and Dusty Miller . Groundcover s include native grasses, Honey-pots, Cranberry Heath, Common Correa, Common Heath and Rough Guinea Flower.

Roadsides, creeks and coastal reserves also support significant remnant native vegetation communities. These remnants are important as they provide habitat and food for local fauna such as birds, small mammals and reptiles.



Drooping Sheoak

torquay / jan juc

10

Tall Trees

BOTANICAL NAME Eucalyptus aromaphloia COMMON NAME Scentbark ENVIRONMENTAL CONDITIONS Moist loams, tolerating wet periods but not inundation. HEIGHT/SPREAD 12-20m/7-15m COMMENTS Large shade tree. Bark aromatic when crushed.

BOTANICAL NAME Eucalyptus baxteri COMMON NAME Brown Stringybark ENVIRONMENTAL CONDITIONS Well drained damp soil. HEIGHT/SPREAD 15-40m/4-20m COMMENTS GOOd shade and shelter tree.

BOTANICAL NAME Eucalyptus obliqua

COMMON NAME Stringybark ENVIRONMENTAL CONDITIONS Moist well drained soil, tolerating short dry periods.

HEIGHT/SPREAD 5-30m/6-20m COMMENTS Excellent shade and shelter tree for larger areas.

BOTANICAL NAME Eucalyptus ovata COMMON NAME Swamp Gum ENVIRONMENTAL CONDITIONS Prefers moist soil, tolerates inundation during winter and dryness in summer.

HEIGHT/SPREAD 6-20m/6-10m COMMENTS Fast growing densely crowned tree. Good for providing shade.

BOTANICAL NAME Eucalyptus tricarpa

COMMON NAME Red Ironbark ENVIRONMENTAL CONDITIONS Poor shallow soil including clays and gravels.

HEIGHT/SPREAD 10-30m/10-20m COMMENTS Attractive upright to spreading tree with rough dark bark. BOTANICAL NAME Eucalyptus viminalis

COMMON NAME Manna Gum ENVIRONMENTAL CONDITIONS Adaptable to a wide range of soil, but will grow better on deeper soil. HEIGHT/SPREAD 10-40m/8-15m COMMENTS Fast growing tree used as a food source by koalas.

BOTANICAL NAME Eucalyptus willisii COMMON NAME Shining Peppermint ENVIRONMENTAL CONDITIONS Prefers drier conditions. HEIGHT/SPREAD 2-10m/4m COMMENTS Small tree with fibrous bark on lower trunk. Masses of small cream flowers in Spring.

Trees

BOTANICAL NAME Acacia implexa COMMON NAME Lightwood ENVIRONMENTAL CONDITIONS Variety of soils including poor gravels. HEIGHT/SPREAD 5-15m/4-7m COMMENTS Fast growing, upright small tree with open crown. Mid to dark green foliage. Flowers perfumed cream balls Dec-March.

BOTANICAL NAME Acacia mearnsii COMMON NAME Black Wattle ENVIRONMENTAL CONDITIONS Prefers well drained soil. Will grow under harsh conditions. HEIGHT/SPREAD 5-15m/6-10m COMMENTS Fast growing, short lived (15yrs) wattle with dark green feathery-like (bipinnate) foliage and strongly scented pale yellow flowers Sept-Dec.

BOTANICAL NAME Acacia melanoxylon

COMMON NAME Blackwood ENVIRONMENTAL CONDITIONS

Tolerates a wide range of soils, but prefers deep, moist soil. HEIGHT/SPREAD 6-30m/4-15m COMMENTS Long lived wattle suited to screening and wind breaks. Dense green foliage and pale creamy flowers July-Oct.

BOTANICAL NAME Acacia pycnantha COMMON NAME Golden Wattle ENVIRONMENTAL CONDITIONS GrOWS Well on heavy and light soil, prefers well drained soil. HEIGHT/SPREAD 3-8m/2-5m COMMENTS Hardy, quick growing, large, leathery dark green leaves (phyllodes). Good for screening, windbreaks and erosion control. Large golden yellow flowers Jul-Oct BOTANICAL NAME Acacia retinoides COMMON NAME Wirilda ENVIRONMENTAL CONDITIONS Adaptable to all soils and conditions including salt and moderate lime.

HEIGHT/SPREAD 3-8m/3-5m COMMENTS Quick growing, can become profuse. Green slender foliage with pale yellow flowers spring - summer.

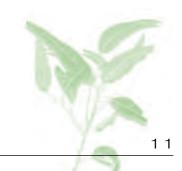
BOTANICAL NAME Allocasuarina verticillata COMMON NAME Drooping Sheoke ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 4-10m/3-6m COMMENTS Hardy tree with

drooping greyish-green branchlets. Good for wind break.

BOTANICAL NAME Eucalyptus leucoxylon ssp bellariensis common NAME Bellarine Yellow Gum ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 10-12m comments Small tree unique to Torquay/Jan Juc and the Bellarine Peninsula.



Hop Goodenia



Tall Shrubs 2.5 - 6 metres

BOTANICAL NAME Acacia paradoxa COMMON NAME Hedge Wattle ENVIRONMENTAL CONDITIONS Adaptable to most soil. HEIGHT/SPREAD 2-4m/2-5m COMMENTS Fast growing dense and spreading shrub covered with thorns. Excellent small bird habitat. Golden yellow flowers in Spring.

BOTANICAL NAME Acacia verniciflua COMMON NAME Varnish Wattle ENVIRONMENTAL CONDITIONS Tolerates wet and dry soil. HEIGHT/SPREAD 2-4m/3-5m COMMENTS Quick growing light screening plant with profuse golden balls in spring.

BOTANICAL NAME Acacia verticillata COMMON NAME Prickly Moses ENVIRONMENTAL CONDITIONS Tolerates most conditions and

withstands periods of waterlogging. HEIGHT/SPREAD 2-5m/3-5m COMMENTS Low shrub to open tree with prickly leaves. Excellent bird habitat. Bright yellow flowers June-Dec.

BOTANICAL NAME Banksia marginata

COMMON NAME Silver Banksia ENVIRONMENTAL CONDITIONS Common on a wide variety of sites and soils, but prefers good drainage. Tolerates soils wet in winter and dry in summer. HEIGHT/SPREAD 2.5-6m/1-5m COMMENTS LOW shrub in heathlands to small tree in open forests. Excellent screening plant. Stiff dark green leaves. Honey coloured flowers Oct-June. Attractive to birds. BOTANICAL NAME BURSARIA Spinosa COMMON NAME Sweet Bursaria ENVIRONMENTAL CONDITIONS Prefers well drained soil. HEIGHT/SPREAD 2-6m/2-3m COMMENTS Prickly shrub with creamy fragrant flowers Dec-March. Important nectar source for birds and insects. Bundles of brown seed pods in autumn.

BOTANICAL NAME Leptospermum continentale COMMON NAME Prickly Tea-tree ENVIRONMENTAL CONDITIONS Adaptable, tolerates moisture. HEIGHT/SPREAD 2-4m/1-2m

COMMENTS Hardy plant which is great for screening. Masses of white flowers Oct-March.

BOTANICAL NAME Leptospermum scoparium COMMON NAME Manuka

ENVIRONMENTAL CONDITIONS Dry sites.

HEIGHT/SPREAD TO 5m tall COMMENTS Variable plant with dense dark green prickly foliage and white flowers.

BOTANICAL NAME LEUCOPOGON parviflorus common NAME Coast Beard Heath ENVIRONMENTAL CONDITIONS Well drained sandy soil. HEIGHT/SPREAD 2-4m/2-3m comments Shrub to small tree with masses of densely bearded white flowers July-Nov. Berries bird attracting. Slow growing.

BOTANICAL NAME Melaleuca lanceolata

COMMON NAME MOONAH ENVIRONMENTAL CONDITIONS Tolerates a wide range of soils, wet and dry, but prefers well

drained soil. HEIGHT/SPREAD 2-5m/3-6m COMMENTS Hardy shrub to small tree which provides excellent shelter/screening. Cream flowers in cylindrical spikes Oct-Dec. BOTANICAL NAME Myoporum insulare

COMMON NAME Common Boobialla

ENVIRONMENTAL CONDITIONS Highly adaptable plant, although prefers sun and well drained soil.

HEIGHT/SPREAD 2-6m/3m COMMENTS Fire retardant. Large rounded shrub, dense foliage, smooth, thick dark green leaves, white flowers with purple spots in spring, Good screening and hedging plant, salt tolerant.

BOTANICAL NAME Ozothamnus ferrugineus

COMMON NAME Tree Everlasting ENVIRONMENTAL CONDITIONS Prefers moist, well drained soil. HEIGHT/SPREAD 2-6m/1-3m COMMENTS Shrub to small tree. Narrow dark green leaves and white flower clusters Nov-Feb.

Medium Shrubs 1 - 3 metres

BOTANICAL NAME Acacia acinacea COMMON NAME Gold-dust Wattle ENVIRONMENTAL CONDITIONS Adaptable to well drained soil. HEIGHT/SPREAD 0.5-2.5m/2-4m COMMENTS Hardy plant good for low screening, profuse bright yellow balls Aug-Nov.

BOTANICAL NAME Acacia myrtifolia COMMON NAME Myrtle Wattle ENVIRONMENTAL CONDITIONS Suits most soils. HEIGHT/SPREAD 1-3m/1-2m

COMMENTS Fast growing ornamental bush with reddish stems, good for low screening. Profuse flowering in spring.

BOTANICAL NAME Acacia suaveolens common NAME Sweet Wattle ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 1-3m/2-5m comments Fast growing, ornamental low screen or windbreak. Bluish green narrow leaves. Perfumed cream flowers April-Oct.

BOTANICAL NAME Alyxia buxifolia COMMON NAME Sea Box ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 1-2m/1-3m COMMENTS Dark green hard leaved low shrub. Produces white flowers and red fruit.

BOTANICAL NAME Atriplex cinerea COMMON NAME Coast Saltbush ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 1-2m/2-3m COMMENTS Fast growing, dense spreading shrub. Silver/grey

leaves. Good low screen.

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BOTANICAL NAME Correa alba COMMON NAME White Correa ENVIRONMENTAL CONDITIONS Well drained soil, tolerating moisture or extended dry periods. HEIGHT/SPREAD 0.5-2m/1-3m COMMENTS A useful plant for soil binding or as a low screen. Waxy star shaped flowers most of the year.

BOTANICAL NAME Correa reflexa COMMON NAME Common Correa ENVIRONMENTAL CONDITIONS Well drained soil.

HEIGHT/SPREAD 0.3-2m/1-2m COMMENTS Medium sized shrub with light green or green/red bells March-Sept. Excellent plant for dry shady positions.

BOTANICAL NAME Goodenia ovata COMMON NAME Hop Goodenia ENVIRONMENTAL CONDITIONS Grows in any situation. Tolerates waterlogging.

HEIGHT/SPREAD 1-2.5m/1-3m COMMENTS Green leaves, bright yellow flowers spring to summer.

BOTANICAL NAME Hibbertia aspera COMMON NAME Rough Guineaflower

ENVIRONMENTAL CONDITIONS

Scattered occurrence over near coastal range, on rocky hillsides or sandy soils. HEIGHT/SPREAD 1-2.5m COMMENTS Bushy green shrub with yellow flowers Sept-Dec.

BOTANICAL NAME Olearia axillaris COMMON NAME Coast Daisy Bush ENVIRONMENTAL CONDITIONS Well drained dry sandy soil. Full sun. HEIGHT/SPREAD 1-2m/1-2m COMMENTS Attractive flowering plant with aromatic leaves and yellow daisy flowers Feb-April. BOTANICAL NAME Olearia glutinosa COMMON NAME Sticky Daisy Bush ENVIRONMENTAL CONDITIONS Well drained, sandy soil. HEIGHT/SPREAD 2m/1.5m COMMENTS Ideal for coastal gardens, resistant to salt spray.

BOTANICAL NAME Pomaderris ferruginea COMMON NAME Rusty Pomaderris ENVIRONMENTAL CONDITIONS HEIGHT/SPREAD COMMENTS

BOTANICAL NAME Pomaderris paniculosa ssp paralia COMMON NAME Coast Pomaderris ENVIRONMENTAL CONDITIONS Well drained, dry soil. HEIGHT/SPREAD 1-2.5m high COMMENTS Hardy coastal plant with leaves dark green above and whitish beneath. Small cream flowers in spring

BOTANICAL NAME Pultenaea daphnoides common NAME Large leaf Bushpea

ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 1-3m/0.5-2m COMMENTS Attractive shrub with large yellow and red pea flowers.

BOTANICAL NAME Spyridium parvifolium

COMMON NAME Dusty Miller ENVIRONMENTAL CONDITIONS Well drained soil.

HEIGHT/SPREAD 1-3m/1-2m COMMENTS Shrub good for providing screen in dry, shady areas. Small white flowers are surrounded by dusty-white floral leaves July-Nov.

Low Plants to 1 metre high

BOTANICAL NAME Allocasuarina misera

COMMON NAME Dwarf Sheoke ENVIRONMENTAL CONDITIONS Moist well drained sandy soil. HEIGHT/SPREAD 0.5-1m/1-2m COMMENTS Ornamental, slow growing shrub. Male plant has bronze flowers, female reddish purple flowers.

BOTANICAL NAME Calytrix tetragona COMMON NAME Fringe Myrtle ENVIRONMENTAL CONDITIONS Well drained soils, tolerating extended dry periods and occasional inundation. HEIGHT/SPREAD 1m/1-2m COMMENTS Fine green aromatic leaves. Very attractive dense heads of white and pink flowers Aug-Nov.

BOTANICAL NAME Dillwynia cinerescens

COMMON NAME Grey Parrot Pea ENVIRONMENTAL CONDITIONS Prefers dry soils, although can tolerate a wide range of well drained soil types.

HEIGHT/SPREAD 0.6-1m/0.5-1.5m COMMENTS Open, erect or spreading understorey shrub with clusters of yellow and orange pea flowers July-Nov.

BOTANICAL NAME DIllwynia glaberrima

COMMON NAME Heath/Smooth Parrot Pea

ENVIRONMENTAL CONDITIONS Can tolerate a wide range of well drained soil types. HEIGHT/SPREAD 1m/1-2m COMMENTS Bright yellow and red flowers Aug-Dec. BOTANICAL NAME DIllwynia sericea COMMON NAME Showy Parrot Pea ENVIRONMENTAL CONDITIONS Very adaptable.

HEIGHT/SPREAD 0.6-1m/0.5-1.5m COMMENTS Cylindrical leafy spikes of yellow and red, apricot, or orange flowers Aug-Dec. Useful as a low screen plant.

BOTANICAL NAME Epacris impressa COMMON NAME Common Heath ENVIRONMENTAL CONDITIONS Moist well drained soil, tolerating limited wet or dry periods once established.

HEIGHT/SPREAD 0.5-1m/0.2-0.6m COMMENTS Floral emblem of Victoria. Open, wiry shrub with attractive pink or white flowers March-Nov. Good rockery plant, particularly when planted in groups.

BOTANICAL NAME GONOCATPUS tetragynus COMMON NAME COMMON Raspwort ENVIRONMENTAL CONDITIONS MOIST to dry well drained soil. HEIGHT/SPREAD 0.1-0.3m/0.2-0.4m COMMENTS LOW bushy herb with loose spikes of tiny pinkish red flowers Dec-Feb.

BOTANICAL NAME Helichrysum scorpioides common NAME Button Everlasting ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 0.3m/0.2-0.3m comments Large yellow buttons spring-autumn. Attractive

spring-autumn. Attractive rockery plant which dies back after flowering.

BOTANICAL NAME Hibbertia riparia COMMON NAME Erect Guineaflower

ENVIRONMENTAL CONDITIONS Well drained moist soil. HEIGHT/SPREAD 0.3-1m/0.6 COMMENTS Open erect shrub with yellow flowers spring and summer.

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BOTANICAL NAME Leptospermum myrsinoides

COMMON NAME Heath (silky) Teatree

ENVIRONMENTAL CONDITIONS

Adaptable, prefers good drainage, but can tolerate poor drainage once established. HEIGHT/SPREAD 0.5-1m/1m COMMENTS Attractive shrub with white or pink flowers in spring and summer.

BOTANICAL NAME Leucophyta brownii

COMMON NAME Cushion Bush ENVIRONMENTAL CONDITIONS Well drained dry conditions. Full sun. HEIGHT/SPREAD 0.2-1m/0.5-2m COMMENTS Attractive rounded silvery/grey shrub which withstands coastal spray and salt. Foliage reflects available light at night time, making it an ideal plant for defining pathways.

BOTANICAL NAME Leucopogon virgatus

COMMON NAME Common Beard Heath

ENVIRONMENTAL CONDITIONS Well drained soils, tolerating some dryness once established. HEIGHT/SPREAD 0.3-1m/0.2-0.6 COMMENTS An excellent garden plant ideal for filling small gaps between shrubs.

BOTANICAL NAME Olearia ramulosa COMMON NAME Twiggy Daisy Bush ENVIRONMENTAL CONDITIONS Well drained soil.

HEIGHT/SPREAD 0.5-1m/1m COMMENTS Attractive garden plant with white or mauve flowerheads Sept-May. Fast growing.

BOTANICAL NAME Rhagodia candolleana

COMMON NAME Seaberry Saltbush ENVIRONMENTAL CONDITIONS Well drained soil.

HEIGHT/SPREAD 1m/1m COMMENTS Semi-succulent scrambling shrub. Small white flowers Dec-apr. Small red berries autumn. BOTANICAL NAME Senecio quadridentatus common NAME Cotton Fireweed ENVIRONMENTAL CONDITIONS Very adaptable to most soils. HEIGHT/SPREAD 0.4-1m/0.5-1m comments Withstands very dry conditions. Greyish in appearance.

BOTANICAL NAME Sphaerolobium vimineum COMMON NAME Leafless Globe-

pea

ENVIRONMENTAL CONDITIONS Moist well drained soil. HEIGHT/SPREAD 0.3-0.6m/0.3-0.6m COMMENTS Attractive in a rockery or planted with other small shrubs. Small yellow pea flowers Sept- Jan.

BOTANICAL NAME Tetratheca ciliata COMMON NAME Common Pink Bells

ENVIRONMENTAL CONDITIONS Well drained soil, responding to extra moisture in summer. HEIGHT/SPREAD 0.3-0.5m/0.3-0.6m COMMENTS Profuse fragrant pink or mauve flowers July-Dec.



Groundcovers

BOTANICAL NAME Acrotriche serrulata common NAME Honey pots ENVIRONMENTAL CONDITIONS Moist

well drained soil tolerating dry periods. HEIGHT/SPREAD 0.1-0.3m/0.5-1m

COMMENTS Slow growing, dense ground covering shrub. Translucent tubular flowers May-Oct with a honey fragrance.

BOTANICAL NAME Astroloma humifusum

COMMON NAME Cranberry Heath ENVIRONMENTAL CONDITIONS Well drained soil tolerating dry periods once established. HEIGHT/SPREAD 0.1-0.5m/1-1.5m COMMENTS Dense spreading mat like plant with attractive small bright red tubular flowers most of the year. Excellent for rockeries, embankments, under shrubs or in hanging baskets.

BOTANICAL NAME Atriplex semibaccata

COMMON NAME Creeping/Berry Saltbush

ENVIRONMENTAL CONDITIONS Well drained soil, salt tolerant. HEIGHT/SPREAD 0.1-0.3m/1-3m COMMENTS Spreading prostrate shrub with grey-green leaves.

BOTANICAL NAME Bossiaea prostrata

COMMON NAME Creeping Bossiaea ENVIRONMENTAL CONDITIONS Well drained soil. Suitable in sun or shade.

HEIGHT/SPREAD Prostrate/0.5-1.5m COMMENTS Prostrate, lightly spreading, showy pea flowers in Spring. BOTANICAL NAME Carpobrotus rossii

COMMON NAME Karkalla ENVIRONMENTAL CONDITIONS Sandy soil. Full sun required for flowers. HEIGHT/SPREAD Prostrate/2-3m COMMENTS Prostrate succulent perennial herb with thick fleshy leaves and pale purple to pink flowers on short stalks. Good soil binding plant. Flowers most of the year.

BOTANICAL NAME Chrysocephalum apiculatum common NAME Common Everlasting ENVIRONMENTAL CONDITIONS

Widespread and variable in a variety of habitats. HEIGHT/SPREAD 0.3m/1-2m comments Perennial of the daisy family. Silvery foliage and golden flower heads which occur most of the year. Excellent rockery plant.

BOTANICAL NAME Dichondra repens COMMON NAME Kidney Weed ENVIRONMENTAL CONDITIONS Moist well drained soil. Shade. HEIGHT/SPREAD Prostrate., creeping. COMMENTS Matting, prostrate herb. Lawn substitute. Kidney shaped leaves with tiny cream flowers Sept-Dec.

BOTANICAL NAME Einadia nutans COMMON NAME Nodding Saltbush ENVIRONMENTAL CONDITIONS Tolerates dry soil. HEIGHT/SPREAD 0.3m/1.2m COMMENTS Fire retardant. Useful groundcover for banks and rockeries.

BOTANICAL NAME Goodenia geniculata COMMON NAME Bent Goodenia

ENVIRONMENTAL CONDITIONS Moist soil.

HEIGHT/SPREAD 0.1-0.5m/0.1-0.5m COMMENTS Perennial suckering matting herb. Long flowering. Yellow flowers. Excellent rockery plant.

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BOTANICAL NAME Kennedia prostrata

COMMON NAME Running Postman ENVIRONMENTAL CONDITIONS Well drained soil.

HEIGHT/SPREAD Prostrate/1-2.5m COMMENTS Fast growing prostrate with very showy red pea flowers most of the year.

BOTANICAL NAME Platylobium obtusangulum

COMMON NAME Common Flat- pea ENVIRONMENTAL CONDITIONS Prefers drier and well drained soil. HEIGHT/SPREAD 0.3-0.5m/1m COMMENTS Triangular leaves and small attractive yellow and red pea flowers in spring.

BOTANICAL NAME Threlkeldia diffusa COMMON NAME Coast Bonefruit ENVIRONMENTAL CONDITIONS Moist saline soil.

HEIGHT/SPREAD Prostrate-0.3m/1m COMMENTS Spreading succulent perennial herb. Matting plant for coastal conditions.

BOTANICAL NAME Viola hederacea COMMON NAME Ivy-leaf Violet ENVIRONMENTAL CONDITIONS Moist to wet soil.

HEIGHT/SPREAD Prostrate, creeping.

COMMENTS Fast growing herb which creates a dense mat with small white flowers most of the year.



Running Postman

Grasses, Sedges, Lilies, Irises & Grasstrees

BOTANICAL NAME Arthropodium strictum

COMMON NAME Chocolate Lily ENVIRONMENTAL CONDITIONS Well drained soil.

HEIGHT/SPREAD 0.2-1m/0.2-0.8m COMMENTS Attractive and adaptable perennial. Chocolate scented violet coloured flowers.

BOTANICAL NAME Austrodanthonia geniculata COMMON NAME Kneed Wallaby

Grass ENVIRONMENTAL CONDITIONS

Requires full sun or semi shaded positions with well drained soil.

HEIGHT/SPREAD 0.1-0.4m high COMMENTS Excellent contrast plant in landscaping.

BOTANICAL NAME Austrodanthonia racemosa COMMON NAME Stiped Wallaby

Grass ENVIRONMENTAL CONDITIONS Dry to moist well drained soils. HEIGHT/SPREAD TO 20cm high, stems 0.1-0.6m high. COMMENTS Variable perennial grass of slender tufts or dense tussocks ideal for a native lawn.

BOTANICAL NAME Austrostipa flavescens

COMMON NAME Spear Grass ENVIRONMENTAL CONDITIONS Suits most soil.

HEIGHT/SPREAD 0.3-0.8m/1.2m COMMENTS Densely tufting grass which provides a soft graceful form ideal for landscaping. BOTANICAL NAME AUSTROSTIPA MOILIS COMMON NAME Supple Spear Grass ENVIRONMENTAL CONDITIONS MOIST soils.

HEIGHT/SPREAD To 30cm high, stems to 1.5m high. COMMENTS Robust, erect tufted grass which adds an element of interest to the ground flora of gardens.

BOTANICAL NAME Carex appressa COMMON NAME Tall sedge

ENVIRONMENTAL CONDITIONS Requires ample moisture, tolerating periods of inundation. HEIGHT/SPREAD 0.5-1.2m/0.5-1m COMMENTS Suitable for wet areas, stabilising soil, or as an aquatic or bog garden plant.

BOTANICAL NAME Carex breviculmis COMMON NAME Common Grasssedge

ENVIRONMENTAL CONDITIONS Very adaptable, from exposed slopes to moist depressions. HEIGHT/SPREAD TO 15cm high. COMMENTS Small densely tufted sedge with triangular stems.

BOTANICAL NAME Dianella revoluta COMMON NAME Black-anther Flaxlily

ENVIRONMENTAL CONDITIONS Well drained soil. Tolerates dry soils in shade.

HEIGHT/SPREAD 0.3-1m/0.5-2.5m COMMENTS Perennial with dark green leaves and blue flowers on branched stems in spring/ summer.

BOTANICAL NAME Gahnia sieberiana COMMON NAME Red-fruited Saw sedge

ENVIRONMENTAL CONDITIONS Tolerates moist soil for most of the year.

HEIGHT/SPREAD 1.5-3m/2-3m COMMENTS Perennial sedge forming tussocks. Attractive strap like leaves and flower head. Important butterfly food source and habitat for small birds. BOTANICAL NAME Isolepis nodosa COMMON NAME Knobby Club-rush ENVIRONMENTAL CONDITIONS Moist soil, tolerates dry and wet conditions when established. HEIGHT/SPREAD 0.5-1.5m/0.6-2m COMMENTS Hardy plant providing interesting contrast in landscapes. Ideal for wet areas.

BOTANICAL NAME Lepidosperma species COMMON NAME Sword/rapier-

sedges

ENVIRONMENTAL CONDITIONS Tolerates moist soil with full sun or dry soil in partial sun. HEIGHT/SPREAD 0.5-1.5m high COMMENTS Strappy leaves and attractive erect foliage and decorative flowers.

BOTANICAL NAME Lomandra longifolia common NAME Spiny-headed Matrush ENVIRONMENTAL CONDITIONS Well drained soil tolerating dry shade. HEIGHT/SPREAD 0.5-1m/0.5-1.2m

COMMENTS Hardy perennial, smooth bright green strappy leaves, scented yellowish flowers Sept-Dec.

BOTANICAL NAME Lomandra multiflora common NAME Many-flowered Mat-rush ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD 0.2-0.5m/0.15-0.2m comments Stiff heathland plant with strap like leaves. Attractive purple/yellow flowers.

BOTANICAL NAME Microlaena stipoides

COMMON NAME Weeping grass ENVIRONMENTAL CONDITIONS Moist well drained soil.

HEIGHT/SPREAD 0.3m/0.6m COMMENTS Native grass with delicate arching form. Good for a lawn substitute in shady areas.



BOTANICAL NAME Patersonia fragilis COMMON NAME Short Purple flag ENVIRONMENTAL CONDITIONS Tolerates inundation for short periods.

HEIGHT/SPREAD 0.1-0.2m/0.4m COMMENTS Attractive plant in rockery landscape. Purple flowers on short stems in spring/summer.

BOTANICAL NAME Patersonia occidentalis

COMMON NAME Long Purple-flag ENVIRONMENTAL CONDITIONS Tolerates inundation in winter and drying out in summer. HEIGHT/SPREAD 0.2-0.4m/0.3-0.6m COMMENTS Attractive plant suitable for bog gardens or pond edges but also tolerant of dry positions in late spring/ summer.

BOTANICAL NAME Poa labillardierei COMMON NAME TUSSOCK Grass ENVIRONMENTAL CONDITIONS Well drained soil.

HEIGHT/SPREAD 0.2-0.9/0.7-1m COMMENTS Densely forming perennial tussock grasses with soft graceful form suiting many landscape styles.

BOTANICAL NAME Poa poiformis COMMON NAME TUSSOCK Grasses ENVIRONMENTAL CONDITIONS Well drained sandy soil, tolerating saline soil and salt spray. HEIGHT/SPREAD 0.2-0.9m/1m COMMENTS Densely tufting grass with bluish leaves.

BOTANICAL NAME Themeda triandra COMMON NAME Kangaroo Grass ENVIRONMENTAL CONDITIONS Adaptable to most soils which do not remain wet.

HEIGHT/SPREAD 0.4-0.9m/0.7m COMMENTS Perennial tussock with attractive green/purple foliage and drooping "paw" like flower heads. BOTANICAL NAME Xanthorrhoea australis

COMMON NAMEAUSTRAL GRASS-TREE ENVIRONMENTAL CONDITIONS Well drained soil, tolerating dry conditions once established. HEIGHT/SPREAD 1-3m COMMENTS Attractive slow growing perennial plant with thick woody trunk surrounded by grassy tuft of leaves. Usually flowers only after fire.

BOTANICAL NAME Xanthorrhoea minor

COMMON NAME Small Grass-tree ENVIRONMENTAL CONDITIONS Well drained soil, tolerating dry conditions once established. HEIGHT/SPREAD 0.6m/1m COMMENTS Attractive slow growing perennial with a subterranean woody trunk. Cream flowers in spring.



Small Grass Tree

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Climbers & Scramblers

BOTANICAL NAME Billardiera scandens COMMON NAME Climbing/Common Appleberry ENVIRONMENTAL CONDITIONS Well drained dry to moist soil. HEIGHT/SPREAD Climber COMMENTS Soft climber with greenish-yellow tubular flowers throughout the year.

BOTANICAL NAME Clematis aristata COMMON NAME MOUNTAIN Clematis ENVIRONMENTAL CONDITIONS Moist soil with shade. HEIGHT/SPREAD Climber COMMENTS Vigorous climber, masses of creamy white starry flowers Aug-March.

BOTANICAL NAME Clematis microphylla COMMON NAME Small-leaved Clematis ENVIRONMENTAL CONDITIONS Well drained soil. HEIGHT/SPREAD Climber COMMENTS Climber with dull green leaves and masses of creamy starry flowers July-Nov.

BOTANICAL NAME Glycine clandestine COMMON NAME Twining Glycine ENVIRONMENTAL CONDITIONS Moist well drained soil, tolerating dry conditions once established. HEIGHT/SPREAD Twining 0.3-2m tall COMMENTS Slender open twiner with delicate bluish-mauve pea flowers Oct-Jan.

BOTANICAL NAME Muehlenbeckia adpressa

COMMON NAME Climbing Lignum ENVIRONMENTAL CONDITIONS Well drained sandy soil. HEIGHT/SPREAD Climber COMMENTS Perennial with small greenish-yellow flowers Sept-Dec. Good for fences and retaining walls, tolerates salt exposure and dryness. BOTANICAL NAME Tetragonia implexicoma common NAME Bower Spinach ENVIRONMENTAL CONDITIONS Well drained sandy soil. Tolerates dry soil with shade. HEIGHT/SPREAD 0.3/2m comments Succulent plant suitable for sandy soils/dunes.

BOTANICAL NAME Zygophyllum billardieri common NAME Coast Twin-leaf ENVIRONMENTAL CONDITIONS Sandy well drained soil tolerating dry periods. HEIGHT/SPREAD 0.3-0.6/1m

COMMENTS Fire retardant. Suitable for exposed coastal conditions. Attractive bright yellow flowers most of the year.



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Botanical Name

Acacia acinacea Acacia implexa Acacia mearnsii Acacia melanoxylon Acacia myrtifolia Acacia paradoxa Acacia pycnantha Acacia retinoides Acacia suaveolens Acacia verniciflua Acacia verticillata Acrotriche serrulata Allocasuarina misera Allocasuarina verticillata Alyxia buxifolia Arthropodium strictum Astroloma humifusum Atriplex cinerea Atriplex semibaccata Austrodanthonia geniculata Austrodanthonia racemosa Austrostipa flavescens Austrostipa mollis Banksia marginata Billardiera scandens Bossiaea prostrata Bursaria spinosa Calytrix tetragona Carex appressa Carex breviculmis Carpobrotus rossii Chrysocephalum apiculatum Clematis aristata Clematis microphylla Correa alba Correa reflexa Dianella revoluta Dichondra repens **Dillwynia cinerescens** Dillwynia glaberrima Dillwynia sericea Einadia nutans Epacris impressa Eucalyptus aromaphloia

Common Name

Gold-dust Wattle Lightwood Black Wattle Blackwood Mvrtle Wattle Hedge Wattle Golden Wattle Wirilda Sweet Wattle Varnish Wattle **Prickly Moses** Honey pots Dwarf Sheoke **Drooping Sheoke** Sea Box Chocolate Lily **Cranberry Heath** Coast Saltbush Creeping/Berry Saltbush Kneed Wallaby Grass Stiped Wallaby Grass Spear Grass Supple Spear Grass Silver Banksia Climbing/Common Appleberry Creeping Bossiaea Sweet Bursaria Fringe Myrtle Tall sedge Common Grass-sedge Karkalla Common Everlasting Mountain Clematis Small-leaved Clematis White Correa Common Correa Black-anther Flax-lily Kidney Weed Grey Parrot Pea Heath/Smooth Parrot Pea Showy Parrot Pea Nodding Saltbush Common Heath Scentbark

Botanical Name

Eucalyptus baxteri Eucalyptus leucoxylon ssp bellariensis Eucalyptus obligua Eucalyptus ovata Eucalyptus tricarpa Eucalyptus viminalis Eucalyptus willisii Gahnia sieberiana Glycine clandestina Gonocarpus tetragynus Goodenia geniculata Goodenia ovata Helichrysum scorpioides Hibbertia aspera Hibbertia riparia Isolepis nodosa Kennedia prostrata Lepidosperma species Leptospermum continentale Leptospermum myrsinoides Leptospermum scoparium Leucophyta brownii Leucopogon parviflorus Leucopogon virgatus Lomandra longifolia Lomandra multiflora Melaleuca lanceolata Microlaena stipoides Muehlenbeckia adpressa Myoporum insulare Olearia axillaris Olearia glutinosa Olearia ramulosa Ozothamnus ferrugineus Patersonia fragilis Patersonia occidentalis Platylobium obtusangulum Poa labillardierei Poa poiformis Pomaderris ferruginea Pomaderris paniculosa ssp paralia Pultenaea daphnoides Rhagodia candolleana

Common Name

Brown Stringybark

Bellarine Yellow Gum Stringybark Swamp Gum Red Ironbark Manna Gum **Shining Peppermint** Red-fruited Saw-sedge Twining Glycine Common Raspwort Bent Goodenia Hop Goodenia Button Everlasting Rough Guinea-flower Erect Guinea-flower Knobby Club-rush Running Postman Sword/rapier sedges Prickly Tea-tree Heath (silky) Tea-tree Manuka Cushion Bush Coast Beard Heath Common Beard Heath Spinv-headed Mat-rush Many-flowered Mat-rush Moonah Weeping grass Climbina Lianum Common Boobialla Coast Daisy Bush Sticky Daisy Bush Twiggy Daisy Bush Tree Everlasting Short Purple flag Long Purple-flag Common Flat-pea Common Tussock Grass Blue Tussock Grass Rusty Pomaderris Coast Pomaderris Large leaf Bush pea Seaberry Saltbush

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Senecio quadridentatus Sphaerolobium vimineum Spyridium parvifolium Tetragonia implexicoma Tetratheca ciliata Themeda triandra Threlkeldia diffusa Viola hederacea Xanthorrhoea australis Xanthorrhoea minor Zygophyllum billardieri Cotton Fireweed Leafless Globe-pea Dusty Miller Bower Spinach Common Pink Bells Kangaroo Grass Coast Bonefruit Ivy-leaf Violet Austral Grass-tree Small Grass-tree Coast Twin-leaf



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Appendix 4

Data Collected from Physical Survey (Isis Planning & Surf Coast Shire, 2003)

Categories – Physical Assessment

Street Character

- A = Vegetation dominates buildings mostly screened.
- B = Vegetation, but buildings visible.
- C = Mixture of vegetation and bare naturestrip.
- D = Open naturestrip and front yards

Predominant Front Setback of Buildings

- A = More than 9
- B = 6-9
- C = 0-5
- M = Varied setbacks

Street construction

- A = Gravel
- B = Bitumen with unsealed shoulders
- C = All bitumen

plus

- 1 = kerb & channel
- a = on-street parking

Footpaths

- A = No footpaths
- B = one side of street only
- C = both sides of street

plus

- 1 = unsealed
- 2 = sealed

Services

- A = underground/disguised
- B = clearly visible from the street

Building Height

- A = Single storey
- B = Two storey
- C = Two & three storey
- M = Mixture of heights

Wall Materials

- A = Weatherboard/Fibro
- B = Modern forms of cladding eg Harditex, shadow clad, corrugated iron
- C = Blockwork/rendered brick
- D = Brick veneer walls
- M = Mixture of materials

Roof Material

- A = Colourbond/zincalume
- B = Tiles
- M = Mixture of roof materials

plus

- 1 = flat roof
- 2 = pitched roof
- 3 = mix of roof forms

Building Colours

- A = Subdued
- B = Bright
- M = Mixture

Views

- A = High
- B = Medium Low
- C = None

Site treatment

- A = little/no site cut/fill
- B = moderate site cut/fill
- C = Excessive site cut/fill

Extent of Vegetation Cover

- A = High
- B = Medium
- C = Low
- M = Varied

Front Fences

- A = None
- B = Low
- C = High
- M = Varied

Side Fences

- A = None
- B = Post and wire
- C = Paling
- M = Mixture

Building Age

- A = Prior to 1970
- B = 1970-1990
- C = 1990-today
- M = Mixture of ages

Building bulk

- A = light and well integrated
- B = moderately bulky
- C = visually bulky
- M = varied

Carports/garages

- A = not visible
- B = partially visible, well integrated
- C = highly visible from the street

Topography

- 1 = minimal slope
- 2 = moderate slope
- 3 = steep slope

Data from Physical Assessment of Torquay Jan Juc Residential Areas

Other comments																						Numerous high, solid front fences		
Topography	٢	-	-	-	-	-	-	-	-	1 - 2		, -	1	٢	1	1	-		1	1	1	r.	-	
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Services	A	۷	A	A	A	A	A	A	A	A		В	В	В	В	В	В		В	В	В	В	В	
Footpaths	1A	1A	1A	2A	1A	1A	1A	1A	1A	1A		0	0	0	0	0	0		0	0	0	1A	0	
Street Const.	C1a	C1a	C1a	C1a	C1a	C1a	C1a	C1a	C1a	C1a		C1a	C1a	C1a	C1a	C1a	C1a		C1a	C1a	C1a	C1a	C1a	
əpA pbl8	c	υ	υ	υ	U	υ	υ	υ	c	с		B-C	B-C	B-C	A-C	A-C	Σ		Μ	Μ	Μ	Σ	A-B	
sələidəV	c	υ	ပ	ပ	U	ပ	υ	ပ	с	с		В	В	В	В	В	В		В	В	В	В	В	
Roof Mat.	Ά?	M3	M2	M2	M3	M3	M3	M3	M3	M3		M3	A3	M3	M3	M3	M3		M3	M3	M3	M3	M3	
.16M II6W	В	Σ	۵	۵	Μ	٥	۵	۵	δ	В		Σ	A	Σ	Μ	Σ	Σ		Μ	Μ	Σ	Σ	Σ	
Bldg Colour	Δ	Σ	Σ	Σ	Μ	Σ	Σ	Σ	Μ	Σ		Μ	Σ	Μ	Σ	Σ	Μ		Σ	Σ	Σ	Σ	Σ	
Bulk	C	B-C	в	в	С	в	в	в	В	B-C		В	A	В	A	A	A		A	A	A	А	A-B	
tdgi9H gbl8	В	Σ	Σ	Σ	B	Σ	٨	٨	Μ	в		Μ	A	Μ	Σ	A	A		A	A	A	A	۲	
Front Setback	С	υ	ပ	υ	С	ပ	υ	ပ	B-C	в		B-C	B-C	B-C	A-B	A-B	A-B		A	A	Σ	Σ	A-B	
Front Fence	Μ	Σ	A	Σ	Μ	Σ	A-B	A-B	Μ	Σ		Μ	A-B	Μ	Σ	Δ	В		Σ	Σ	Σ	Μ	Σ	
Vegt Cover	С	υ	ပ	υ	C	υ	υ	ပ	С	С		В	В	В	В	В	В		В	В	В	В	В	В
Street Char.	D	۵	۵	۵	D	ပ	υ	ပ	С	۵		С	υ	С	ပ	υ	C		ပ	B-C	с	С	с- С-	
ΤΟΡΩΝΑΥ	The Esplanade (north Horseshoe Bend Rd)	Golden Beach Way	South Beach Estate	Horseshoe Bend Road	The Esplanade (b/w Horseshoe Bend Road and Creek)	Glaneuse Avenue	Loch Ard Drive	Aquilla Avenue	Fischer Street (north Deep Creek)	Highlander Street		Fischer Street (south Deep Creek)	Riverside Drive	Darian Road (east Geelong Rd)	Cowrie Road	Central Avenue	Beach Road (east Geelong Rd)		Puebla Street	Spring Street	Zeally Bay Road	Bristol Road	Boston Road	Anderson Street
Precinct	-	-	-	-		-	-	-	-	~	. 1	2	7	2	2	7	7	•	2	2	2	2	2	7

Other comments							Low density residential area											Numerous high front fences	
Topography	-	-	-	7	-		1 - 2	2	1 - 2	1 - 2	1 - 2	2	1 - 2	2	2	2	2	2	0
sw∋iV	υ	B-C	A	B-C	ပ		B-C	A-B	B-C	A-B	B-C	B-C	B-C	B-C	B-C	B-C	B-C	ပ	(
Side Fence	с	С	С	C	C		В	υ	ပ	С	ပ	С	С	с	С	C	С	U	(
Site treat.	ċ	A	А	A-B	A		A-B	A-B	A-B	A-B	A-B	A-B	A-B	ċ	ć	A-B	A-B	В	(
Services	В	В	В	В	A		В	۷	в	В	Ш	В	В	В	В	В	В	В	ſ
Footpaths	0	0	1A	0	1A		0	0	0	0	0	0	0	0	0	0	0	1A	(
Street Const.	C1a	C1a	C1a	C1a	C1a		В	C1a	G	C1a	C1a	C1a	C1a	C1a	C1a	C1a	C1a	G	č
əgA gbl8	A-B	A-C	Μ	A-B	ပ		B-C	υ	в	B-C	C B	B-C	B-C	р С	B-C	B-C	B-C	B-C	(
vehicles	в	В	B-C	В	ပ		В	υ	в	B-C	с В	B-C	B-C	Р С	B-C	B-C	B-C	в	(
Roof Mat.	M3	M3	M3	M3	M3		M3	M3	M3	M3	M3	M3	M3	M3	M3	M3	M3	M3	
.16M II6W	Σ	B-M	B-M	Μ	Σ		B-M	B-M	Σ	Μ	Σ	Μ	Σ	B-M	Μ	Μ	В	Σ	:
Bldg Colour	Σ	Σ	Μ	Μ	Σ		Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Μ	Σ	Σ	:
Bulk	A	A	Σ	В	В		A-B	υ	A	A-B	A-B	В	A-B	A-B	A-B	A-B	A-B	В	(
Bldg Height	٨	Σ	Μ	Μ	٨		A	в	Σ	Σ	Σ	В	Μ	Σ	Σ	Μ	Σ	Σ	ſ
Front Setback	в	В	В	B-C	B-C		٨	Ч В	В	B-C	С В	B-C	B-C	с В	B-C	B-C	B-C	С В-С	(
Front Fence	в	Σ	В	Μ	Σ		В	A	в	Σ	Σ	Σ	δ	в	Σ	В	В	Σ	:
Vegt Cover	в	В	С	Μ	C		Σ	υ	B-C	с	B-C	υ	B-C	υ	υ	С	υ	B-C	(
Street Char.	C-D	В	D	B-C	D		В	٥	U	C-D	C-D	D	U	۵	D	C-D	C-D	B-C	(
TORQUAY	Price Street	Park Lane	The Esplanade (south Deep Creek)	Sarabande Cres, Rocklea Dve, Alleyne Ave & Aurora Cres	Beach Road (west Geelong Road)		Grossmans Rd, Brody Dve, Coombes Rd etc.	Great Ocean Views	Sunningdale Ave & Muirfield Ave	Carnarvon Avenue	Troon Ave, Carnoustie Ave & Sandwich Ave	Duffields Road	Area north of Creek & west of Duffields Rd	Domain Road	Alexandra Ave	Watersun Rd, Sandhurst Cres, Regal Rd & Cantala Dve	Riviera Drive	Sunset Strip (east of Wattle Court)	-
Precinct	2	7	7	7	7	1	ю	4	5	2	5	2	5	ъ С	2	5	5	5	

Precinct		Street Char.	Vegt Cover	Front Fence	ront Setback	thgiaH gbl8	Bulk	Bldg Colour	.16M II6W	Roof Mat.	2910ideV	əgA gbl8	Street Const.	Footpaths	Services	Site treat.	side Fence	swəiV	Topography	
	Broadbeach Road & Castaway Crescent	A	A-B	B	. ∠	æ	œ	A	B-M	M3	۷	с в	5	0	B	A-B	B	A-B	7	Low density residential development
~	Sunset Strip (west of Wattle Court)	A	A	ш	A	Σ	A-B	A	Σ	M3	A	С В	ш	0	۵	A-B	В	U	1 - 2	Low density residential development - houses barely visible
~	Bells Boulevarde	٩	۲	В	٩	Σ	A-B	۷	B-M	M3	۲	C B	ш	0	В	A-B	В	с в	5	Low density residential development - houses barely visible

Community Perception modelling, where 'A' generally equates to the most preferred characteristic and 'C' / 'D' generally equates to the least preferred characteristic and 'C' / 'D' generally equates to the least preferred characteristic. 'M' indicates a predominant mixture of characteristics. Topography was not ranked as a positive or negative characteristic. The physical assessment data above was ranked in terms of the preferred neighbourhood characteristics of the Torquay Jan Juc