

27 FEB 2006



Development Plan

Briddy Drive East - Torquay

February 2006

PLANNING ENVIRONMENT ACT 1987
SURF COAST PLANNING SCHEME

THE DEVELOPMENT/USE IS DEEMED SATISFACTORY
PURSUANT TO Clause 43.04-1 OF THE SCHEME

Signed 

for and on behalf of the Council of the Surf Coast Shire
Date: 22/3/06 Sheet No. of sheets.

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1 Introduction

1.1 Context

This development plan applies to the land located to the north of Grossmans Road, west of Surf Coast Highway, south of Deep Creek and east of Illawong Drive, Torquay. The locality plan below shows the subject site in context with its surroundings. This report forms part of a Development Plan in response to the Development Plan Overlay – Schedule 4 (DPO) to the Surf Coast Planning Scheme.

The land is located immediately north of Grossman’s Road, in proximity to community and commercial facilities including the SurfCoast Shire Offices, two primary Schools, community meeting rooms under construction and commercial facilities associated with SurfCoast Plaza further south. The area has immediate connection to Grossmans Road and Surf Coast Highway. This proximity to local services and the core town centre east of SurfCoast Highway direct the development of this land for conventional residential development as a logical extension from the existing urban area of Torquay.

Figure 1: Location of the Subject Land



The Development Plan applies to land that is in 20 Titles, all generally one hectare or larger in size. Nine of the lots are owned by a single developer. These nine lots include all lots abutting Deep Creek, providing a continuous development parcel that interfaces with the creek. A plan detailing this ownership pattern is detailed in Figure 2 below. The remaining land includes the St. Therese Primary School (3 lots), and the Tropicana Motel with the remaining 7 lots owned by 5 separate interests.

This development plan seeks to facilitate a residential subdivision that will co-ordinate all land owners who choose to subdivide their land, and will provide direction to ensure the area provides a well resolved, connected and sensitive land subdivision that acknowledges the importance of the creek interface and the location of existing dwellings on some individual lots. The Development Plan process will provide certainty to both Council and the community about the nature of the subdivision that can take place on the land.

The proposed Development Plan affects land covered by Development Plan Overlay Schedule 4 to the SurfCoast Planning Scheme. The Overlay sets out directions and requirements for the Development Plan. This report outlines the details of the Development Plan and how it responds to the requirements of the Overlay.

Figure 2 – Boundary of DPO and land in the ownership of single developer (shown grey)



2 Provisions of the Development Plan

The development plan illustrated in Appendix 1 has a number of features responding to the DPO provisions of the Planning Scheme. These features include:

- Interface to the adjoining Deep Creek with a road network that provides for public interface and connection to all parts of the creek.
- A north south grid based road network to likewise promote north - south orientation in individual lots to enable solar efficiency in house design.
- Specific design directions regarding lots adjacent to the creek to ensure that a sensitive interface to the creek is maintained. This is detailed in directions outlined in Section 2.1 below.
- Provision for appropriate services including a collection and treatment of stormwater through a bio-retention swale parallel to the creek reserve.
- Provision for 1.9 hectares of open space in the form of land to be transferred as Public Conservation and Resource Zone within the creek corridor. This will allow for the protection and rehabilitation of the creek environs as well as the creation of a public path along the creek corridor to link to existing linear trail to the east of the Surf Coast Highway.
- The provision of an at-grade pedestrian crossing across Deep Creek in an area that was previously used as a cattle crossing (and therefore limits the removal of native vegetation).
- Provision through the Development Plan Overlay requirements for erosion control works in the form of bank stabilisation and revegetation in areas along the south bank of Deep Creek where there is bank instability.
- Contribution toward a new sewage pumping station in a location to be agreed upon with Council and Barwon Water.
- Provision of footpaths along one side of all roads that are over 100 metres in length and on both sides of all collector and through roads.
- Provision for the intersection to be upgraded at the corner of Briody Drive and Grossmans Road.
- Provision for streets to interconnect as individual land owners develop land, beyond that held by the major land owner. The use of indicative lot layouts for these properties (as detailed in Section 4.2.2) will enable individual lots to be developed as individual owners so desire.
- Provision of a cycle / pedestrian path parallel to the creek and along key road links through the development plan area to connect local residents to community and open space areas.

The Development Plan shows a street layout for all lots held in common ownership by a single developer. Indicative lot layouts are also provided for other individually held parcels indicating how these lots may be subdivided in the future. It is not incumbent upon owners of these individual lots to choose from these specific options. The indicative plans merely illustrate that with the land parcels are capable of being subdivided completely independently or subdivided with links to the neighbouring parcel, in more than one way.

Subdivision of the individually held lots will need to be tailored to account for existing buildings and dwellings, where owners wish to retain such dwellings.

2.1 Design requirements for lots abutting Deep Creek

In order to establish a sensitive interface to Deep Creek, the following specific design requirements are detailed for all lots to be created with interface to a road reserve or public open space reserve that abuts the creek.

- Any subdivision that creates lots with direct abuttal to a road reserve or public open space which abuts Deep Creek must provide for:
- All lots are to face the creek, with main frontage to look toward the creek, where possible.
- Provision of a building envelope on each lot that directly abut a road or open space reserve to the creek. Such building envelope is to be set back at least 5 metres from the front boundary of lots facing the creek.
- Provision of a planting zone within the first 2 metres in depth along any boundary of a lot with direct abuttal to a road or open space reserve facing Deep Creek.

A permit for subdivision of the land shall require the owner to enter into an agreement under section 173 of the *Planning and Environment Act 1987*, which will provide for:

- Restriction on title for any lot which has direct abuttal to a road reserve or public open space reserve which abuts Deep Creek that development on such lot must:
 - o Not construct any fence across the front of any property facing Deep Creek. Timber bollards placed up to 2 metres apart may be established along property frontages to demarcate property boundaries to the creek.
 - o Not construct a fence more than 1.0 metre in height in respect to any section of side fence between the front boundary alignment and the alignment of the dwelling. Any fence in this setback area must be constructed of a visually permeable material (e.g. Post and wire) so as to allow planting to blend between and through property boundaries.
 - o Not construct a side or rear fence, behind building alignment that is more than 1.8 metres in height (and preferably lower).
 - o Not construct a side fence on any property with direct side frontage to a council road or open space reserve unless such fence provides opportunity for plants to blend between and through property boundaries (e.g. use of post and wire, steel posts and slatted screen fencing)

2.2 Development Contributions

It is noted that that developers of land have entered into voluntary agreements with the SurfCoast Shire to provide for contribution toward physical and community infrastructure including, where relevant:

- Contribution toward the provision and development of a one (1) hectare park for local recreation purposes to generally service properties north of Grossmans Road, between Surf Coast Highway and Messmate Road.
- Transfer of land along Deep Creek to Council, extending a minimum width of at least 30 metres from the centre line of the creek and zoned Public Conservation and Resource Zone as an environment corridor to be managed for fire, erosion and habitat protection.
- Contribution toward revegetation and access works along the southern side of Deep Creek including provision of an at grade pedestrian crossing across the creek.
- Contribution toward the provision of community infrastructure in accordance with Council's Community Infrastructure Needs Analysis, also forming part of the Torquay Jan Juc Strategy 2005.
- Contribution to relevant roadworks generally as detailed in the Development Plan requirements below, and consistent with Council's Transport Infrastructure Assessment Report forming part of the Torquay Jan Juc Strategy 2005.

3 Features of the area and influences on the Development Plan

The following factors have been influential in the development plan that has been prepared for the site:

3.1 Connectivity

The area is located within proximity to the existing Council offices and two primary schools. Current pedestrian access to these facilities is limited as the road network north of Grossmans Road is not presently formed to urban standards. As such, there are no footpaths and the large lot subdivision pattern does not allow direct route. Any future subdivision should seek to reduce the size of the street blocks to allow more direct pedestrian access through a more fine grain pattern of residential streets.

The development of land further west as part of 'Ocean Acres' needs to be considered in terms of connectivity between these estates. The Ocean Acres development requires the provision of a footpath along Briody Drive to Illawong Drive. A connection from this development is to be provided to Grossmans Road through the proposed path, and connection between this path and the proposed development should be made to facilitate movement east to west.

The northern boundary of the area is marked by Deep Creek. This watercourse provides the opportunity for a linear recreation area including a bike path to link to an existing bike/ pedestrian path to the east of Surf Coast Highway which runs all the way to Zeally Bay. A new crossing over the Surf Coast Highway is not recommended, with a preference for utilising the existing controlled intersection at the corner of Grossmans Road and Surf Coast Highway. The pathway already committed to be constructed by Barwon Water (running north - south along the highway) will effectively provide this connection.

The creek corridor has habitat value and contains native and indigenous vegetation. It is noted that there are some environmental weeds within the corridor. In particular, areas of the corridor on the south side of the creek are degraded, and are required to be revegetated as part of the conditions of the Development Plan Overlay.

Informal access across the creek currently exists with an at grade crossing, aligning with a former stock crossing point. Opportunity exists to enhance this crossing as an informal link to the council offices and primary schools for the more isolated low density residential area to the north of the creek. It is noted that an additional opportunity for a more formal crossing exists further west, where an existing culvert crosses the creek, providing safer crossing, above water level. This should be considered in any future development of land to the west of this Development Plan.

Where possible, the use of through roads should be provided to increase the 'connectivity' within the subdivision. Where this is not appropriate or possible, the use of hammerhead courts that allow pedestrian access on main routes should be provided.

3.2 Servicing

3.2.1 Drainage

There is a gentle fall in land toward the Deep Creek watercourse, and this currently provides a drainage function for the land. When the area becomes more urbanised the runoff from within the subdivision will need to be treated prior to being released into the creek. Various options for storm water treatment exist. The most effective for this site with its steep creek banks is considered to be a bio-retention swale system. A long swale running parallel to the top of the creek bank may allow drainage retention and purification to occur in a natural looking, landscaped environment. Further information, including a cross section of a potential system, is been provided in Appendix 2.

3.2.2 Sewerage and Water

Barwon Water is presently pursuing works to upgrade their infrastructure provision of sewerage for the area and this will require a new pumping station to pump waste from the area into the main system. The location of the pump is still to be confirmed following further discussions with Barwon Water.

All existing properties are provided with reticulated water. Minor upgrading of serving will be required to accommodate additional properties in the area.

3.2.3 Other physical services

Other servicing authorities have advised that the land is able to be fully serviced at an acceptable cost.

Briody Drive presently provides access to the lots and this road is capable of providing a collector road function when upgraded to urban standards.

3.3 Reducing impact on native vegetation

Two flora and fauna studies commissioned for the rezoning for the area indicated that the vast majority of the land has been used for grazing and therefore comprises very few species of native vegetation, and these grasses are sporadically located. Habitat value is accordingly very low on most of the land, with the exception of within an approximately 60 metre wide corridor that straddles the creek. The area of vegetation significance is contained within the area zoned Public Conservation and Resource (PCRZ) to be transferred to Council as part of subdivision of the land.

The PCRZ area requires that native vegetation cannot be removed without a planning permit and that the land must be managed for conservation purposes.

The development plan aligns with the zoning of the land, providing roads and residential lots to be located on the land zoned Residential 1, thereby protecting the vegetation, habitat and creek banks located within the PCRZ area.

4 Response to the Development Plan Overlay

4.1 Operation of the overlay

The development plan has been prepared to meet specific directions provided in the Development Plan Overlay - Schedule 4 to the SurfCoast Planning Scheme. A response as to how this development plan responds to each of the directions set out in this schedule is detailed below.

The Development Plan Overlay is used to:

- require a plan to be prepared prior to a permit being issued under the zone;
- provide certainty about the nature of the proposed use or development;
- allow planning permits for subdivision, made in accordance with the development plan, to be exempt from notice to affected land owners and exempt from appeal rights relating to such notice;
- ensure that permits granted are generally in conformity with the Plan; and
- apply particular permit conditions that help to implement the Plan.

4.2 Directions of the Development Plan Overlay

4.2.1 Requirements for Development Plan

The overlay sets out various requirements in the preparation of a Development Plan. These are detailed below with a response as to how each requirement is met by the Development Plan.

Lot size and layout

- *“Provide a variety of residential lot sizes that are well oriented to maximise solar orientation.”*
The street layout indicated on the development plan will allow a subdivision with a variety of allotment sizes with a north/south or an east/west orientation. This layout allows good solar orientation for lots and therefore dwellings on each lot. Specific details of lot sizes will be resolved through the submission of plans for a planning permit for subdivision. It is expected, however that lots will generally range in size from 350 sqm to 1200 sqm.

- *“Provide an appropriate road setback and landscape treatment to the creek frontage to maintain significant native vegetation, control erosion and provide for fire management within the creek corridor.”*

The street layout to the creek involves road frontage along the majority of the interface which ensures that there will be dwellings fronting this public area. This will enhance public surveillance and

safety along the proposed pedestrian and cycle path, and should result in a subdivision with frontages rather than sides (and therefore fences) facing the creek.

All lots and residential roads are to be located at least 30 metres from the centre line of Deep Creek, aligning with, or outside, the PCRZ boundary.

- *"Provide a landscape interface to the Creek environs, to provide an appropriate transition between the residential 1 land within the Development Plan overlay area, the Deep Creek corridor and the low density residential environment to the north of the creek;"*

As well as properties directly facing the creek there are five streets provided that lead to the creek. This allows viewing corridors from within the estate to the open space area along the creek and ensures that a high percentage of dwellings can appreciate and have direct access to the creek environs. Specific requirements of the Development Plan as detailed in Section 2.1 of this documented plan will ensure that a natural type setting is retained along the interface to Deep Creek with minimal fencing and requirements for the planting of native vegetation. This will retain a transition between denser development within this area and the low density development north of the creek. Degraded areas to the south of the creek will be also revegetated as part of the requirements of the Developer Contributions agreement entered into between the Developer and Council in conjunction with the amendment to zone the land to Residential.

- *"Ensure that there is appropriate passive surveillance over the creek corridor and pathway through encouraging dwellings to front the Creek, and by discouraging fences to the dwellings with a creek interface."*

The use of streets to align with the creek interface as well as the prohibition of fencing to the front boundary of properties to face the creek should ensure that there is appropriate passive surveillance over the creek pathway.

Specific design directions to be implemented through a restriction on title are also provided for as detailed in Section 2.1 of this development plan report.

- *All residential lots to be created that will have interface to road or reserve facing Deep Creek should be orientated to have their main frontage facing Deep Creek*

The Development Plan and design requirements detailed in Section 2 of this report provide for all lots to interface and front onto a road or open space reserve to align with Deep Creek.

- *The location of all houses on individual lots that will abut road or Council reserve to abut Deep Creek should provide building envelopes for dwellings and garages to be setback at least 5 metres from the allotment boundary facing Deep Creek. On corner lots where the lot has its main frontage to Deep Creek the development plan should indicate how building envelopes on these lots can orientate dwellings to face toward the creek so as to facilitate passive surveillance of the creek reserve.*

The Development Plan and requirements for subdivision provides specific detail as to how lots will maintain setbacks through the use of building envelopes on individual lots.

Flora, fauna and open space

- Provide a well connected, proportioned and protected environmental corridor of at least 30 metre width along each side of Deep Creek (measured from the centre of creek line) for drainage, erosion, habitat and wildfire management, with a complimentary pedestrian / bike path along the Deep Creek corridor.

An area of at least 30 metres wide from the centre of the creek has been zoned Public Conservation and Resource as part of the rezoning of the developable land to Residential 1. A pedestrian / cycle path is proposed along the interface to this area. The exact location of the path will be determined at the preparation of detailed survey plans at the submission of plans for subdivision. It should be noted that within land that has been zoned Public Conservation and Resource (PCRZ), a planning permit will be required to remove any native vegetation of significance. Hence, the location of the path, if extending into the PCRZ area will need to have regard to the protection of the creek habitat and environs.

It is noted that the an agreement between Council and the Developers of land within Briody Drive requires contribution toward the provision and development of a one (1) hectare park for local recreation purposes to generally service properties north of Grossmans Road, between Surf Coast Highway and Messmate Road. A preferred site for this park has not been nominated on the Development Plan as it is expected that it will need to located further west as part of a broader redevelopment of land in the Torquay West area.

- *Protect the vegetation in the creek corridor and improve the habitat by revegetating degraded sections of the creek environs along the south bank.*
- Part of the provisions agreed between the developers and Council as detailed in Section 2.1 and 2.2 of the Development Plan require revegetation of the south boundary of the creek as part of a condition of planning permit. The development Plan makes allowance for the retention of the creek corridor for habitat revegetation.

- *Minimise the extent of native vegetation removal in association with the subdivision;*
- An on site inspection, correlated with aerial photography and survey plans indicates that all vegetation of significance is to be contained within the PCRZ area. As such it is expected that the subdivision will not require the removal of any native vegetation.

- *The provision of a sustainable at-grade pedestrian crossing across Deep Creek in an area that was previously used as a cattle crossing (and therefore limits the removal of native vegetation). The degraded area should be appropriately revegetated using indigenous plant species;*
- The Development Plan makes provision for this at grade crossing. Conditions on subdivision permit will be required to ensure revegetation and appropriate works are undertaken to create a safe crossing point.

- *To provide an appropriate wildfire management regime to manage the risk from fire and protect the natural values within the western part of the creek corridor including the area covered by the Wildfire Management Overlay;*

An agreement between the landowner of the lots directly abutting the creek has been made with council to pay for the clearance of environmental weeds within the creek corridor as part of the transfer of the creek corridor to Council with particular regard to minimising any risk of wildfire.

Road and pedestrian network

- *Provide a road network that is permeable to pedestrians and provides direct and safe access from the subdivision to the nearby Surf Coast Shire Offices and two Primary Schools along Grossmans Road.*

The prepared development plan indicates the important locations where connectivity for pedestrians should be provided to allow a better access through the area reflective of an existing residential street form and pattern.

- *Provide a street network that is as integrated, but that focuses traffic onto Briody Drive in preference of proposed local streets;*
- *Provide for the upgrading of Briody Drive to urban standards with a 7.5 metre back to back distance and kerb and channel, and footpaths along both sides;*

The street layout is clear and legible and ensures that there is a visible street hierarchy. The street design makes it clear that Briody Drive is the collector road within the area. The plans provides notation that Briody Drive will be upgraded to urban standards, with footpaths along both sides.

- *Provide continuous pedestrian and cycle access along the Deep Creek corridor.*
- A continuous path is provided for on the plan for the extent of land covered by the Development Plan.
- *Provide footpaths along one side of all courts that are over 100 metres in length and on two sides of all through roads;*
 - *Provide for the intersection to be upgraded at the corner of Briody Drive and Grossmans Road;*

The development plan indicates the provision of footpath along relevant sections of road. The provisions of the Overlay conditions, particularly in relation to the establishment of an agreement for the provision of services, ensures that intersection upgrade works will be undertaken as a result of the subdivision of the land.

- *Planting of internal roads with suitable native trees species to complement existing indigenous species;*
- The Development Plan does not nominate specific tree species to be planted within road reservations. This will need to be specified as a condition on permit for subdivision.

Servicing

- *Identify mechanisms for the treatment of storm water to current best practice prior to the appropriate release into Deep Creek.*

A bio-retention swale is indicated to the north of the pedestrian/cyclist pathway and will be used to filter storm water treatment prior to release into Deep Creek. As detailed in Appendix 2 a linear swale is the most appropriate form of storm water treatment.

- *Contribute toward the provision of a sewer pumping station that minimises the removal of native vegetation to the satisfaction of Surf Coast Shire and Barwon Water.*

An appropriate location for the Barwon Water pumping station needs to be determined with Barwon Water prior to the subdivision being constructed. The location of the pumping station needs to have regard to habitat protection along the creek and bank stabilisation.

5 Conclusion







The proposed Development Plan meets the objectives as outlined within Schedule – 4: Briody Drive to the Development Plan Overlay that affects the land. The Plan provides an appropriate response to the overlay requirements indicating:

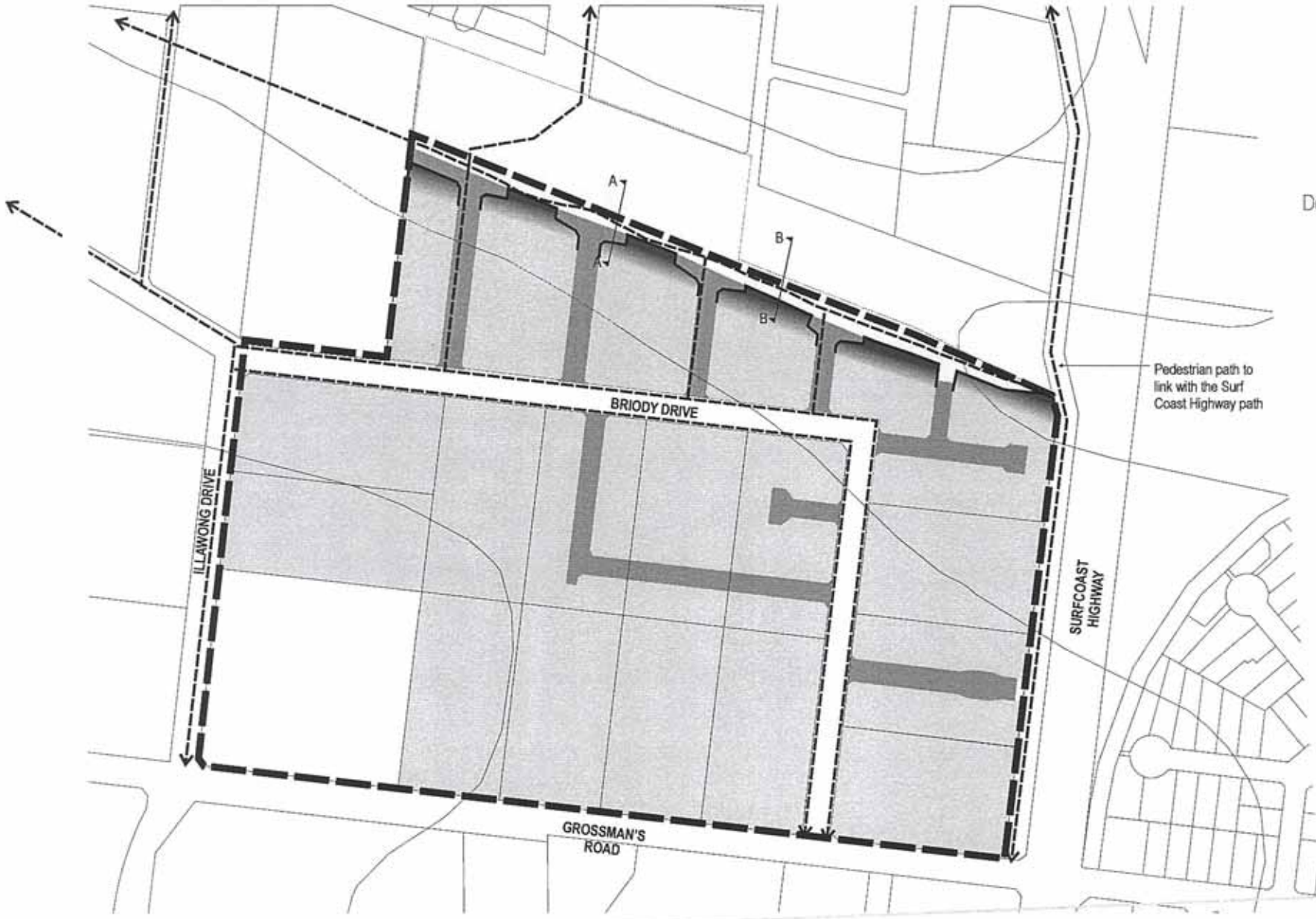
- the general form and layout of the proposed development;
- the treatment of the sensitive creek interface, with the creek environment protected and enhanced;
- the ability to provide connectivity and legibility in the provision of local streets;
- the location of the pedestrian and bicycle path;
- the provision of considerable open space in the form of a linear corridor along Deep Creek, with areas that are also capable of being used for informal active recreation;
- an indication of infrastructure to be provided within the area, including road upgrades, footpaths, the bike path, an at-grade pedestrian crossing over the creek, intersection upgrade for Briody Drive and Grossmans Road, sustainable drainage and contribution to the provision of the Barwon Water pumping station.

Appendix 1

Briody Drive Estate Torquay

Development concept plan

- Legend
- Future subdivision 
 - Open space 
 - Proposed road 
 - Pedestrian/bicycle path 
 - Sensitive interface to creek environment 
 - DPO boundary 



Pedestrian path to link with the Surf Coast Highway path

SURFCOAST HIGHWAY

ILLAWONG DRIVE

BRIODY DRIVE

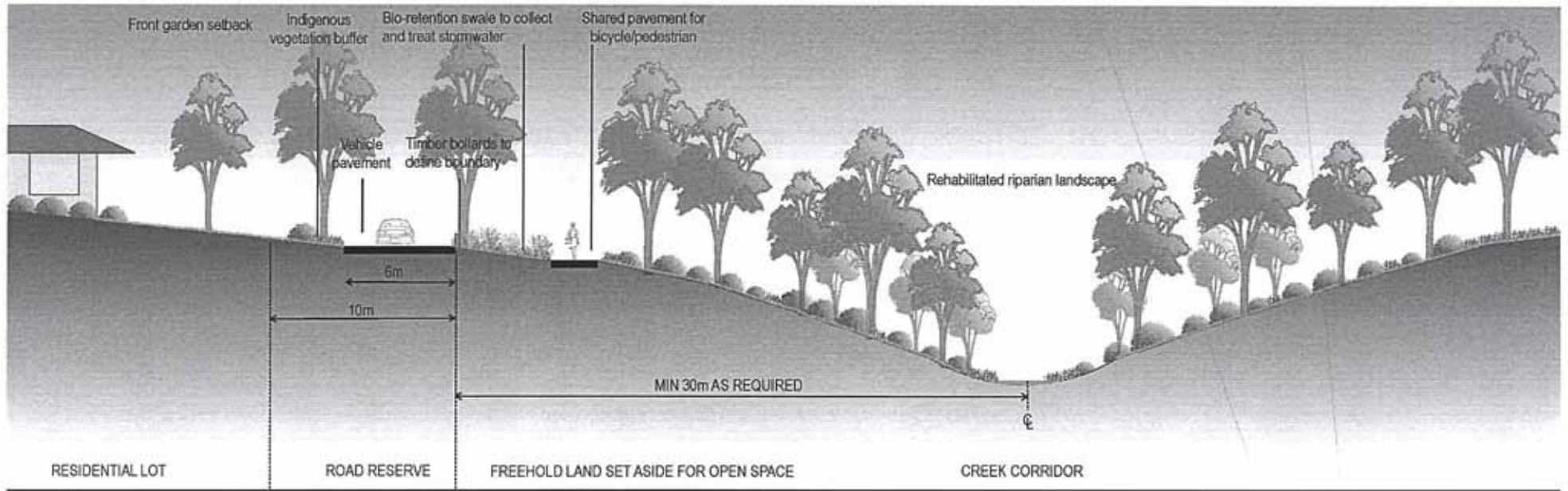
GROSSMAN'S ROAD

RF



Briody Drive Estate Torquay

Creek Interface Cross Sections



Section AA

Project Ref: 04.316
Dwg No.: LCD-005
Scale: 1:200@A3
Date: 23.02.05
Revision: D

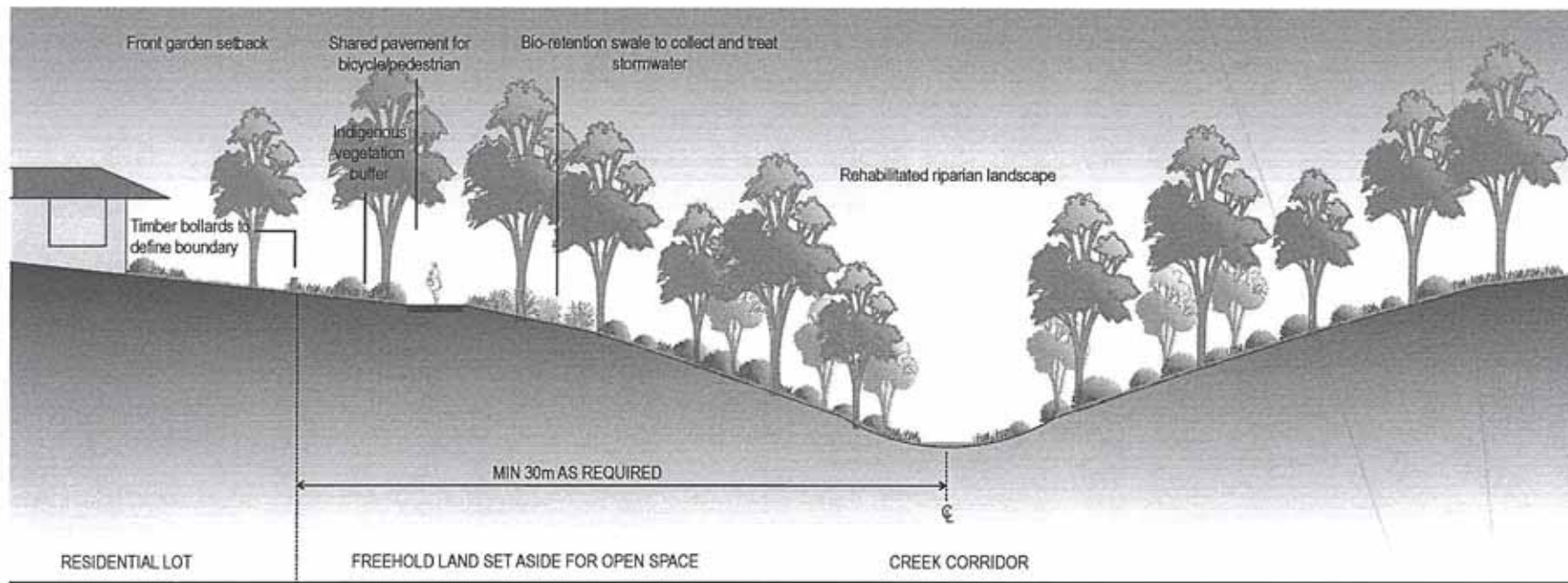


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Briody Drive Estate Torquay

Creek Interface Cross Sections



Section BB

Project Ref: 64,316
Dwg No.: LCD-006
Scale: 1:200@A3
Date: 23.02.06
Revision: D



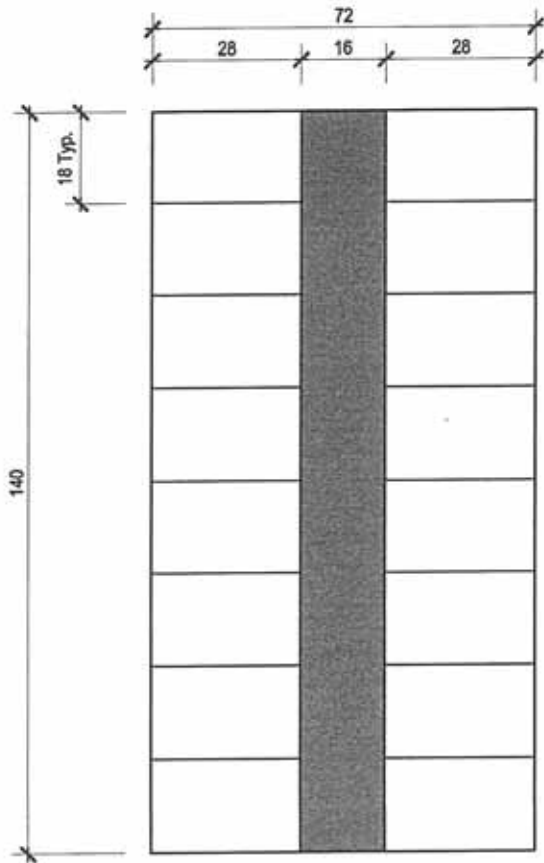
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Briody Drive Estate Torquay

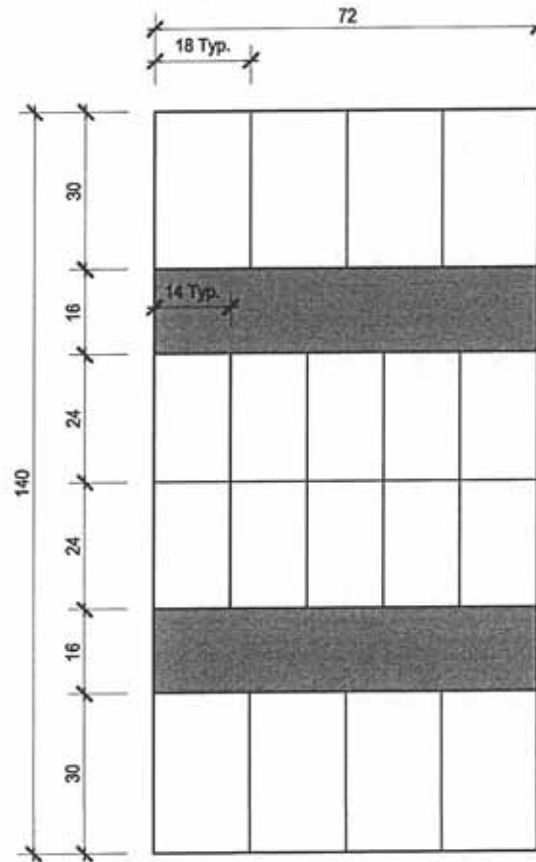
indicative superlot
development configurations

16 lots @ 504m²
Average lot size 504m²



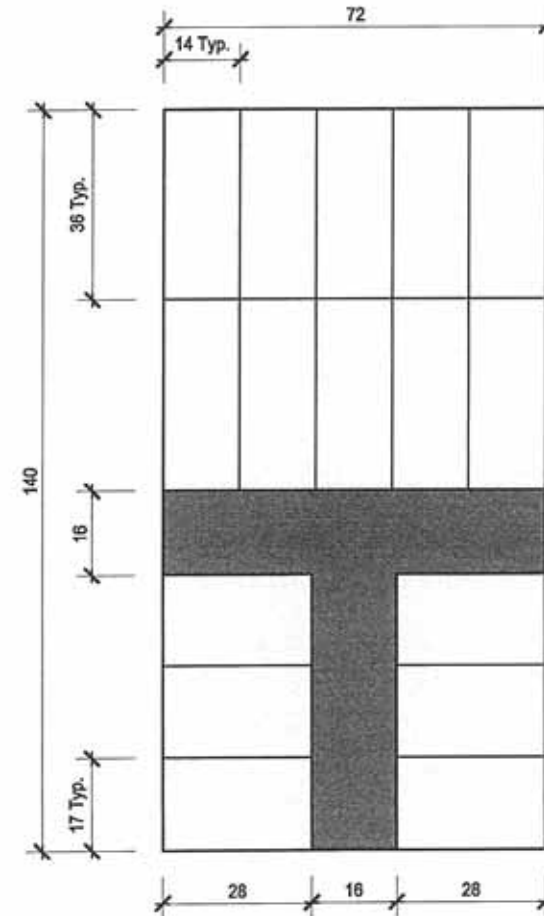
configuration 1

8 lots @ 540m²
10 lots @ 336m²
Average lot size 426m²



configuration 2

10 lots @ 504m²
6 lots @ 476m²
Average lot size 493.5m²



configuration 3

Project Ref: 04.316
Dwg No.: LCD-004
Scale: 1:1000@A3
Date: 21.06.05
Revision: C

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Appendix 2

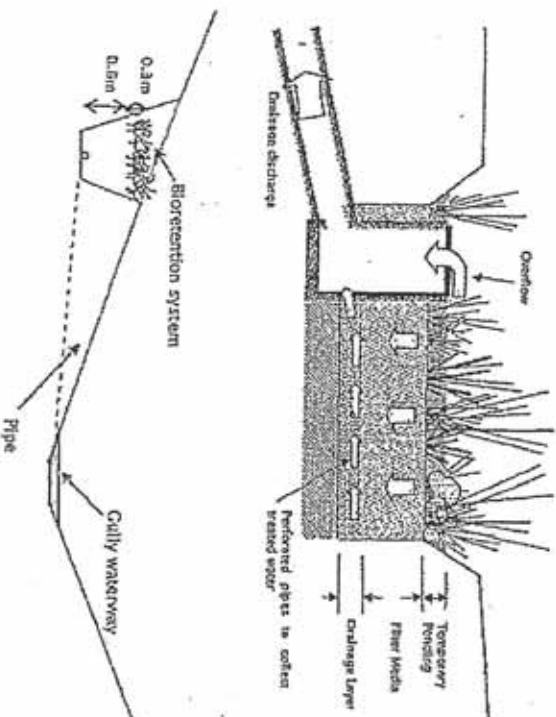


Peter Barry & Associates Pty. Ltd.
Civil Engineers

~~At end of line treatment will therefore be proposed beginning with gross pollutant traps and culminating in a series of interconnected bio-retention systems running parallel with the top of the embankment from weir to easel.~~

Given the proximity to the Creek Invert there will be a number of very low flow outlets to the creek invert, as sufficient length is not available to establish riffle overflow structures. As well the existing growth and steepness of the embankment acts against this treatment.

Bio-retention systems operate by passing runoff through prescribed filtration media, commonly planted with vegetation that provides treatment through fine filtration, extended detention and some biological uptake. They also provide flow retardation and are particularly efficient at removing nutrients. Below is a typical cross section of a bio-retention system including an outlet section to the creek.



Bio-retention cells will drain between rainfall events, that is they have no permanent water. We trust that this is sufficient for your immediate negotiations, with a more detailed drainage document expected in due course.

Yours faithfully
Peter Barry & Associates Pty Ltd

Peter J Barry