



DARRYL ANDERSON CONSULTING PTY LTD

TOWN PLANNING & DEVELOPMENT CONSULTANTS

---

**ADDENDUM TO PREFERRED PROJECT REPORT (DECEMBER 2009)  
MAJOR PROJECT APPLICATION NO. 08\_0034**

**PROPOSED SUBDIVISION AT LOTS 2 AND 3 DP 244652  
URLIUP ROAD BILAMBIL  
(TWEED LOCAL GOVERNMENT AREA)**

**PREPARED FOR:**

JACKSON INTERNATIONAL PTY LTD

**PREPARED BY:**

DARRYL ANDERSON CONSULTING PTY LTD

**MARCH 2010**

Suite 7, Corporate House  
8 Corporation Circuit  
Tweed Heads South NSW 2486

Ph: 07 55233611  
Fax: 07 55233612  
Email: [admin@daconsulting.com.au](mailto:admin@daconsulting.com.au)

## TABLE OF CONTENTS

---

1.0	CULTURAL HERITAGE	3
2.0	LOT LAYOUT	3
3.0	STORMWATER MANAGEMENT PLAN	5
4.0	RETAINING WALLS	5
5.0	SUMMARY AND CONCLUSION	5

### ANNEXURES

ANNEXURE A	Amended Subdivision Layout Plan, Drawing No. 17154D, Revision G (3 Sheets) - B & P Surveys, 15 February 2010
ANNEXURE B	Amended Landscaping Plan Drawing No. A1.DD.3, Amendment B – Donald Irving and Andrew Gold Landscape Architecture, 24 February 2010
ANNEXURE C	Email Correspondence Regarding the Stormwater Management Plan Between Mr Tom Fitzgerald, Mr Mick Denny and Campbell Leonard and Associates, Dated 9 February 2010, 24 February 2010, 26 February 2010 and 2 March 2010
ANNEXURE D	Email Correspondence Regarding Retaining Walls Between Mr Tom Fitzgerald, Mr Mick Denny and Campbell Leonard and Associates, Dated 9 February 2010, 24 February 2010, 26 February 2010 and 2 March 2010

---

**Darryl Anderson Consulting Pty Ltd**

A.C.N. 093 157 165  
Town Planning & Development Consultants

---

## ADDENDUM TO PREFERRED PROJECT REPORT (DECEMBER 2009)

### PROPOSED RESIDENTIAL SUBDIVISION – MP 08\_0034 URLIUP ROAD, BILAMBIL

---

In response to the emails dated 14 January 2010, 1 February 2010 and 9 February 2010 from Mr Tom Fitzgerald of the Department of Planning, the following information is provided.

#### 1.0 CULTURAL HERITAGE

We note that on 31 January 2010 Mr John Sherwood forwarded an email to Mr Tom Fitzgerald including an Addendum to the Heritage Consultant's Report which formed Annexure H of the Environmental Assessment.

We further note that Mr Tom Fitzgerald responded by email dated 1 February 2010 to the effect that the Addendum Cultural Heritage Report clearly resolves the issue he had with the previous report.

#### 2.0 LOT LAYOUT

Following negotiations between Mr Tom Fitzgerald of the Department of Planning and Tweed Shire Council Officers, Council's Traffic Engineer has raised no objections to Lots 12, 14, 16, 18, 20, 22, 24, 26 and 28 having direct vehicular access to Bilambil Road (see email from Tom Fitzgerald to John Sherwood dated 9 February 2010).

Accordingly, we attach an Amended Subdivision Layout Plan at **Annexure A** (Reference Drawing No. 17154D, Revision G, 15 February 2010, B & P Surveys, 3 Sheets).

The Plan deletes the previously proposed rights of carriageway/easements to the internal road to service those lots adjacent to Bilambil Road.

We also enclose an Amended Landscaping Plan showing the proposed Bilambil Road streetscape treatment including landscaping, driveways and acoustic treatment at **Annexure B** (Donald Irving and Andrew Gold Landscape Architecture, Drawing No. A1.DD.3, Amendment B, 24 February 2010).

Where driveways penetrate the acoustic mound and fence, appropriate solid panel gates are proposed to mitigate potential road noise impacts.

Deletion of the access easements over the lots fronting the internal street will reduce traffic volumes by approximately 90 vehicles per day on that street, reduce the number of driveway penetrations (by 9) and result in improved residential amenity and streetscape by enabling additional street plantings.

Provision of direct vehicular access to those lots from Bilambil Road leads to a better planning outcome by deleting the access easements and creating a larger usable area for each burdened lot.

#### **Tweed Local Environmental Plan 2000, Clause 22 – Development Near Designated Roads**

Bilambil Road is a designated road and accordingly this Clause applies to the development proposal. The objectives of this Clause are to protect and improve the capacity, efficiency and safety of designated roads; to prevent development on designated roads that would detract from the scenic attractiveness of the area of Tweed; and, to prevent or reduce the potential impact of traffic noise on development adjacent to designated roads. The relevant matters for consideration in Subclause 4 are addressed in the following table (**Table 1**).

---

**Darryl Anderson Consulting Pty Ltd**

A.C.N. 093 157 165

Town Planning & Development Consultants

TABLE 1 – TWEED LEP 2000 CLAUSE 22(4) COMPLIANCE MATTERS	
LEP ISSUE	ASSESSMENT COMMENT
(a) the development (because of its nature, appearance, cumulative effect or illumination, or the intensity or the volume or type of traffic likely to be generated, or for another similar reason) is unlikely to constitute a traffic hazard or materially reduce the capacity or efficiency of the designated road, and	The amended layout will enable nine residential lots to have direct vehicular access to Bilambil Road which will generate an estimated additional 90 vehicle movements per day. The Traffic Assessment at Annexure 21 of the Environmental Assessment indicates that Bilambil Road has a current AADT of 1800 vehicles per day. The increase is therefore in the order of 5% and given that Bilambil Road will be widened as part of this proposal and as the likely traffic volumes are well within the Road's capacity and the capacity of intersections (see Sections 4.3 and 10 of the Traffic Impact Assessment at Annexure 21 of the Environmental Assessment), it is submitted that the direct vehicular access arrangements now proposed will not constitute a traffic hazard or materially reduce the capacity or efficiency of the designated road. No illumination is proposed other than normal street lights and lighting within future dwellings will be screened by the acoustic barriers and landscaping.
(b) the location, standard and design of access points, and on-site traffic movement and parking arrangements, would ensure that through traffic movement on the designated road is not impeded, and	As indicated in the Civil Engineering Report being Annexure 19 of the Environmental Assessment, it is proposed to widen and kerb and gutter Bilambil Road for the frontage of the site. A concrete footpath will also be provided. This widening will provide appropriate parking and manoeuvring lanes for vehicles entering and leaving the residential lots such that through traffic movements on the designated road are not impeded.
(c) the development, or proposed access to it, will not prejudice any future improvements to, or realignment of, the designated road, and	Council has no current proposals to realign or widen Bilambil Road other than what is currently proposed in this project application.
(d) where the land is in Zone 1(a), 5(a), 7(a), 7(d), 7(f), or 7(l), the development is of a type that necessitates a location in proximity to the designated road for reasons other than only commercial advantage, and	Not Applicable.
(e) the development is of a type that is not sensitive to traffic noise or, if it is, it is located or adequate measures are included to ameliorate any potential noise impact, and	Being a residential development, it is sensitive to road traffic noise and accordingly the measures identified in the Environmental Noise Impact Report contained at Annexure 12 of the Environmental Assessment will be implemented.  As indicated on the Amended Landscaping Plan at <b>Annexure B</b> , appropriate mounding, fencing and suitable solid panel gates across driveways will be installed to mitigate noise impacts.
(f) the development would not detract from the scenic values of the locality, particularly from the point of view of road users, and	The Amended Landscaping Plan at <b>Annexure B</b> demonstrates that the combined mound, acoustic fence and landscaping will suitably screen future urban development and improve the streetscape from the point of view of road users. This issue should be considered in the context of the existing site which comprises a highly degraded former quarry where the landscape and scenic values of the area are minimal and will be significantly improved as a result of the proposed development.

## Darryl Anderson Consulting Pty Ltd

A.C.N. 093 157 165  
Town Planning & Development Consultants

TABLE 1 – TWEED LEP 2000 CLAUSE 22(4) COMPLIANCE MATTERS	
LEP ISSUE	ASSESSMENT COMMENT
(g) where practicable, access to the land is provided by a road other than the designated road, and	The original Environmental Assessment and the Preferred Project Report did not propose direct vehicular access from allotments to Bilambil Road because at that time Council had resisted such access. Whilst alternative access is available, the Department of Planning's preferred arrangement is for direct vehicular access to Bilambil Road and Council has now accepted that arrangement.
(h) in respect of any application for commercial or retail development near the Pacific Highway in Zone 1 (a), 7 (a), 7 (d), 7 (f) or 7 (l)...	Not Applicable.

Having regard to the assessment contained in the table above, it is submitted that the amended layout is unlikely to have an adverse impact on the adjacent designated road being Bilambil Road.

### 3.0 STORMWATER MANAGEMENT PLAN

Issues raised by Mr Tom Fitzgerald in his email of 14 January 2010 relating to stormwater management (Item 3) have been resolved as reflected in the attached email from Campbell Leonard to Mr Tom Fitzgerald dated 21 January 2010, which includes a written response and marked up plans; and the response from Mick Denny of Tweed Shire Council dated 22 January 2010 which, in summary, advises that the documentation in conjunction with previous documentation is satisfactory for development assessment. A copy of the emails and plans is attached at **Annexure C**.

### 4.0 RETAINING WALLS

Issues relating to retaining walls raised in the email from Mr Tom Fitzgerald dated 9 February 2010 have been resolved as reflected in the attached email from Campbell Leonard and Associates to Tom Fitzgerald dated 24 February 2010, the email from Campbell Leonard and Associates to Mick Denny of Tweed Shire Council dated 26 February 2010 and the response from Mick Denny dated 2 March 2010. Copies of these documents are attached at **Annexure D**.

### 5.0 SUMMARY AND CONCLUSION

In summary, it is submitted that this Addendum to the Preferred Project Report adequately addresses the various issues raised by the Department and Council and approval of the revised project as contained in the Preferred Project Report and this Addendum is therefore requested.

**Darryl Anderson Consulting Pty Ltd**

A.C.N. 093 157 165  
Town Planning & Development Consultants



---

**ANNEXURE A      Amended Subdivision Layout Plan, Drawing No. 17154D, Revision G (3 Sheets)**  
**- B & P Surveys, 15 February 2010**

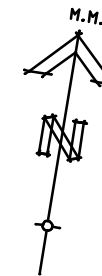
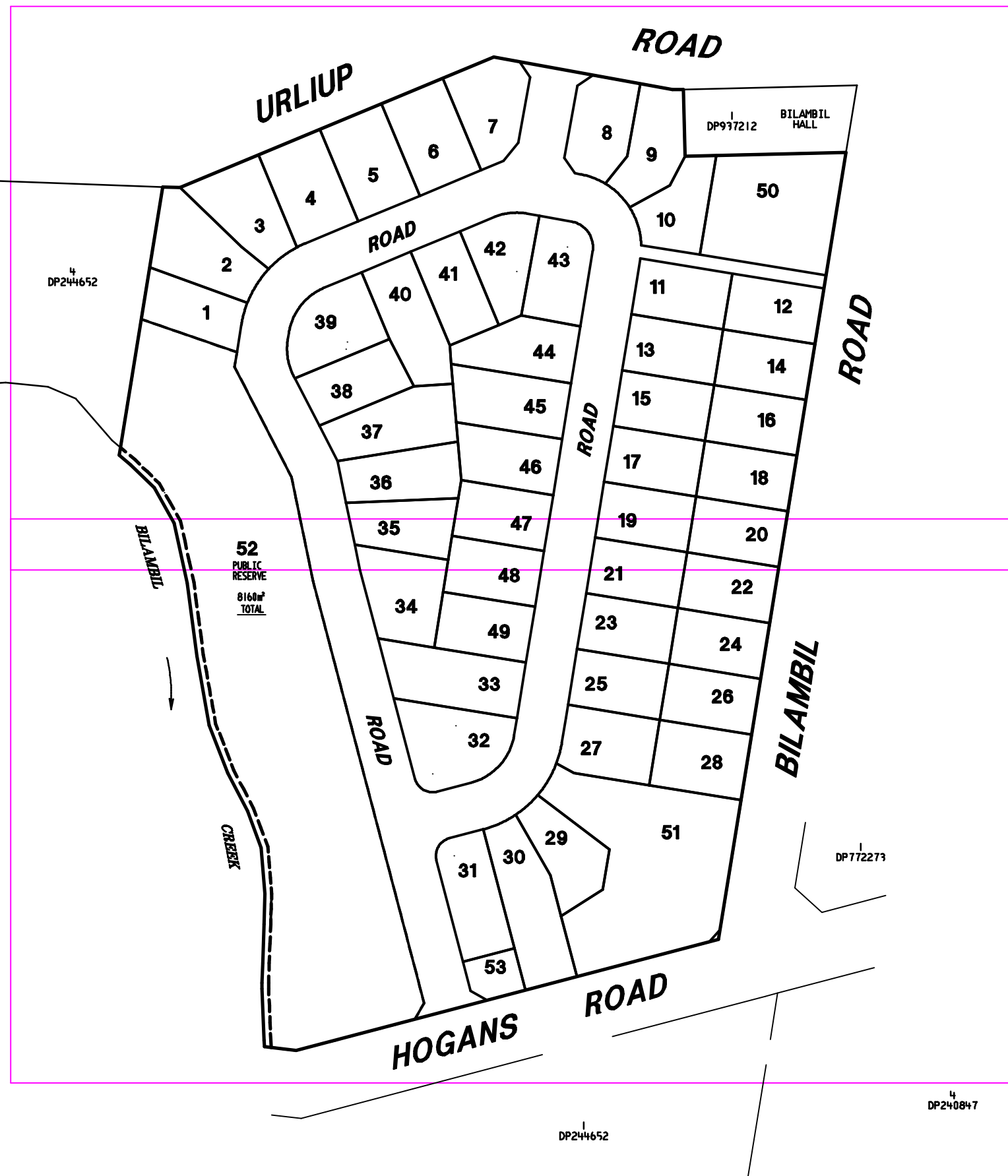
---

**Darryl Anderson Consulting Pty Ltd**

A.C.N. 093 157 165  
Town Planning & Development Consultants

SHEET 2

SHEET 3



Rev G - 15/02/2010 - Amend Emt  
Rev F - 8/12/09 - Amend Creek Bdy  
Rev E - 24/11/09 - Amend layout  
Rev D - 20/05/09 - Amend layout  
Rev C - 16/03/09 - Amendments  
Rev B - 12/03/09 - New Layout  
Revision

Chk'd

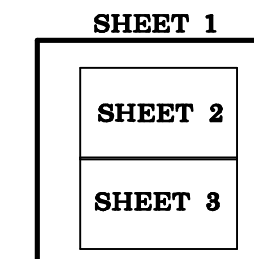
Registered Proprietors

JACKSON INTERNATIONAL PTY LTD

#### Important Notes:

THE PROPOSED LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS AS SHOWN HEREON ARE PRELIMINARY ONLY AND ARE SUBJECT TO FINAL DESIGN, LOCAL AUTHORITY APPROVAL AND REGISTRATION IN THE DEPARTMENT OF LANDS NSW.

#### Sheet Layout



#### IMPORTANT NOTE:



ALL UNDERGROUND SERVICES SHOULD BE LOCATED ON SITE BY RELEVANT AUTHORITIES BEFORE ANY WORK IS COMMENCED.

THIS NOTE IS AN INTEGRAL PART OF THIS PLAN.

### PROPOSED SUBDIVISION PLAN

Of Lots 2 and 3 in DP244652  
Bilambil Road, Bilambil Village

Parish of TERRANORA County of ROUS

**B & P SURVEYS**  
CONSULTING SURVEYORS  
A.B.N. 55 010117236

30 Beryl Street  
Tweed Heads, NSW, 2485, Australia  
Telephone: (07) 5536 3611  
Fax: (07) 5536 3701  
Email: tweed@bpsurveys.com.au  
Webpage: www.bpsurveys.com.au



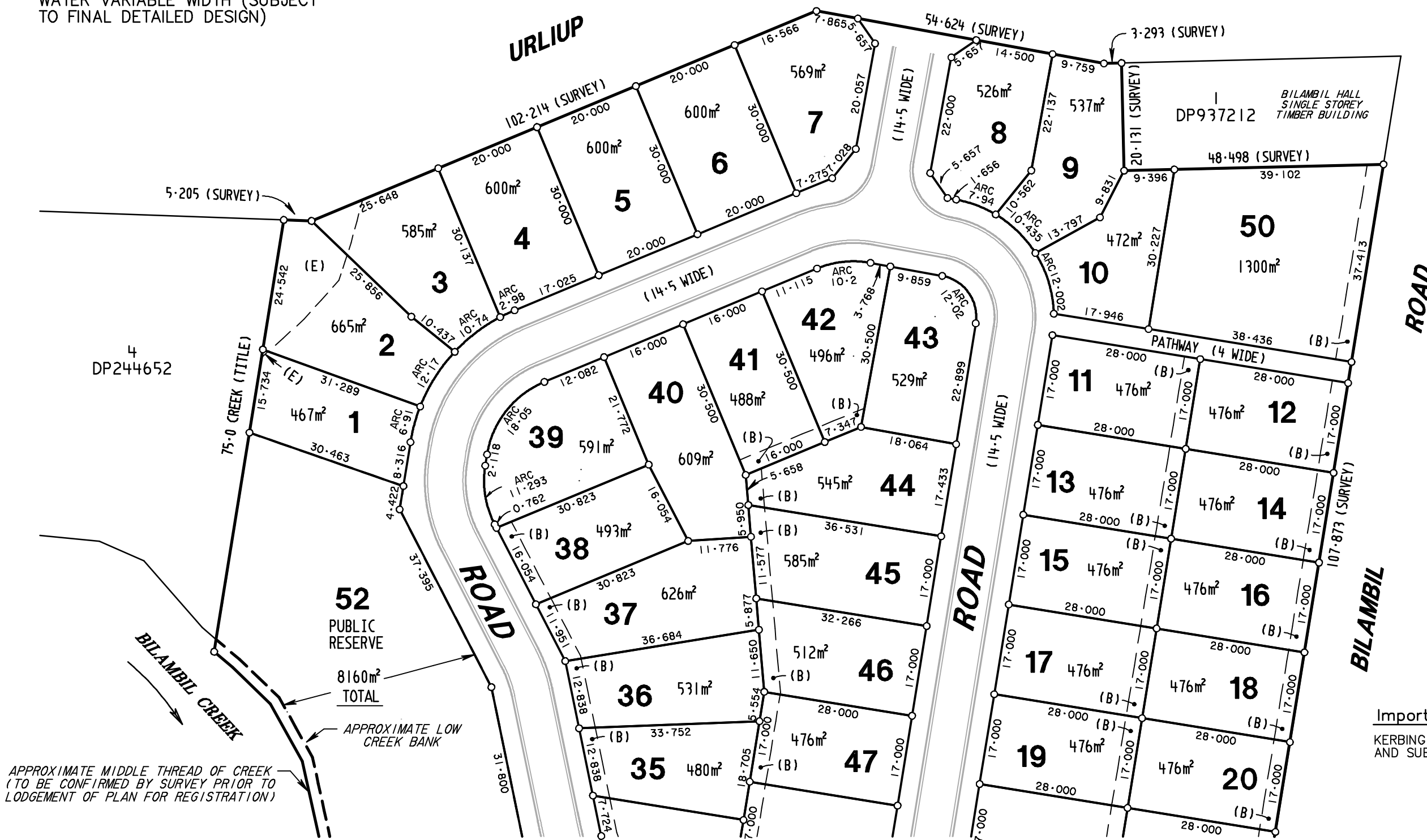
Offices Also At:  
Surfers Paradise Murwillumbah  
Ph. (07) 55390499 Ph. (02) 66721924

J: \15300\15337\Projects\17154D-G.pro

Scale 1 : 1500	Level Datum —	Drawn MES	Chk'd —	F.Bk —	L.Bk —
REF. No. T15337	Date 31/07/08	Drawing No./Size 17154 D	Rev. G		

SHEET 1 of 3

- (B) PROPOSED EASEMENT TO DRAIN  
SEWER AND WATER 3 WIDE (SUBJECT  
TO FINAL DETAILED DESIGN)  
(E) PROPOSED EASEMENT TO DRAIN  
WATER VARIABLE WIDTH (SUBJECT  
TO FINAL DETAILED DESIGN)



#### Important Notes:

KERBING SHOWN IS INDICATIVE ONLY  
AND SUBJECT TO FINAL DETAILED DESIGN

**SHEET 2 of 3**

Rev G - 15/02/2010 - Amend Emt  
Rev F - 8/12/09 - Amend Creek Bdy  
Rev E - 24/11/09 - Amend layout  
Rev D - 20/05/09 - Amend layout  
Rev C - 16/03/09 - Amendments  
Rev B - 12/03/09 - New Layout  
Revision

Chk'd

**JACKSON INTERNATIONAL PTY LTD**

#### Important Notes: (THIS NOTE IS AN INTEGRAL PART OF THIS PLAN)

THE PROPOSED LOT BOUNDARIES, NUMBERS, AREAS AND  
DIMENSIONS AS SHOWN HEREON ARE PRELIMINARY ONLY  
AND ARE SUBJECT TO FINAL DESIGN, LOCAL AUTHORITY  
APPROVAL AND REGISTRATION IN THE DEPARTMENT OF  
LANDS NSW.

#### Sheet Layout

**SHEET 2**

**SHEET 3**

#### IMPORTANT NOTE:



ALL UNDERGROUND SERVICES  
SHOULD BE LOCATED ONSITE  
BY RELEVANT AUTHORITIES  
BEFORE ANY WORK IS COMMENCED.

#### PROPOSED SUBDIVISION PLAN

Of Lots 2 and 3 in DP244652  
Bilambil Road, Bilambil Village

Parish of TERRANORA County of ROUS

J: \15300\15337\Projects\17154D-G.pro

Scale  
1 : 800  
@ A3

Level Datum

F.Bk

L.Bk

Drawn  
MES  
Chk'd

#### B & P SURVEYS CONSULTING SURVEYORS

A.B.N. 55 010117236

30 Beryl Street  
Tweed Heads, NSW, 2485, Australia  
Telephone: (07) 5536 3611  
Fax: (07) 5536 3701  
Email: tweed@bpsurveys.com.au  
Webpage: www.bpsurveys.com.au

Offices Also At : Surfers Paradise Murwillumbah  
Ph. (07) 55390499 Ph. (02) 66721924



A QUALITY ASSURED COMPANY

Ref. No.  
T15337

Date  
31/07/08

Drawing No./Size  
**17154 D**

Rev.  
**G**



M.M.



KERBING SHOWN IS INDICATIVE ONLY  
AND SUBJECT TO FINAL DETAILED DESIGN

[illegible]

- (B) PROPOSED EASEMENT TO DRAIN SEWER AND WATER 3 WIDE (SUBJECT TO FINAL DETAILED DESIGN)
- (C) PROPOSED RESTRICTION ON TITLE TO PROVIDE ADDITIONAL VISITOR CARPARK ONSITE (SUBJECT TO FINAL DETAILED DESIGN)
- (D) PROPOSED EASEMENT FOR SERVICES VARIABLE WIDTH (SUBJECT TO FINAL DETAILED DESIGN)
- (E) PROPOSED EASEMENT TO DRAIN WATER VARIABLE WIDTH (SUBJECT TO FINAL DETAILED DESIGN)

DP 772273

4m<sup>2</sup>  
Proposed Road  
Widening  
(Subject to Final  
Detailed Design)

4  
DP240847

EASEMENT FOR TRANSMISSION  
LINE 40 WIDE (DP564075)

**SHEET 3 of 3**

Chk'd

**JACKSON INTERNATIONAL PTY LTD**

**SHEET 8**

Rev.	
G	

Offices Also At : Surfers Paradise Murwillumbah  
Ph.(07)55390499 Ph.(02)66721924



A QUALITY ASSURED COMPANY





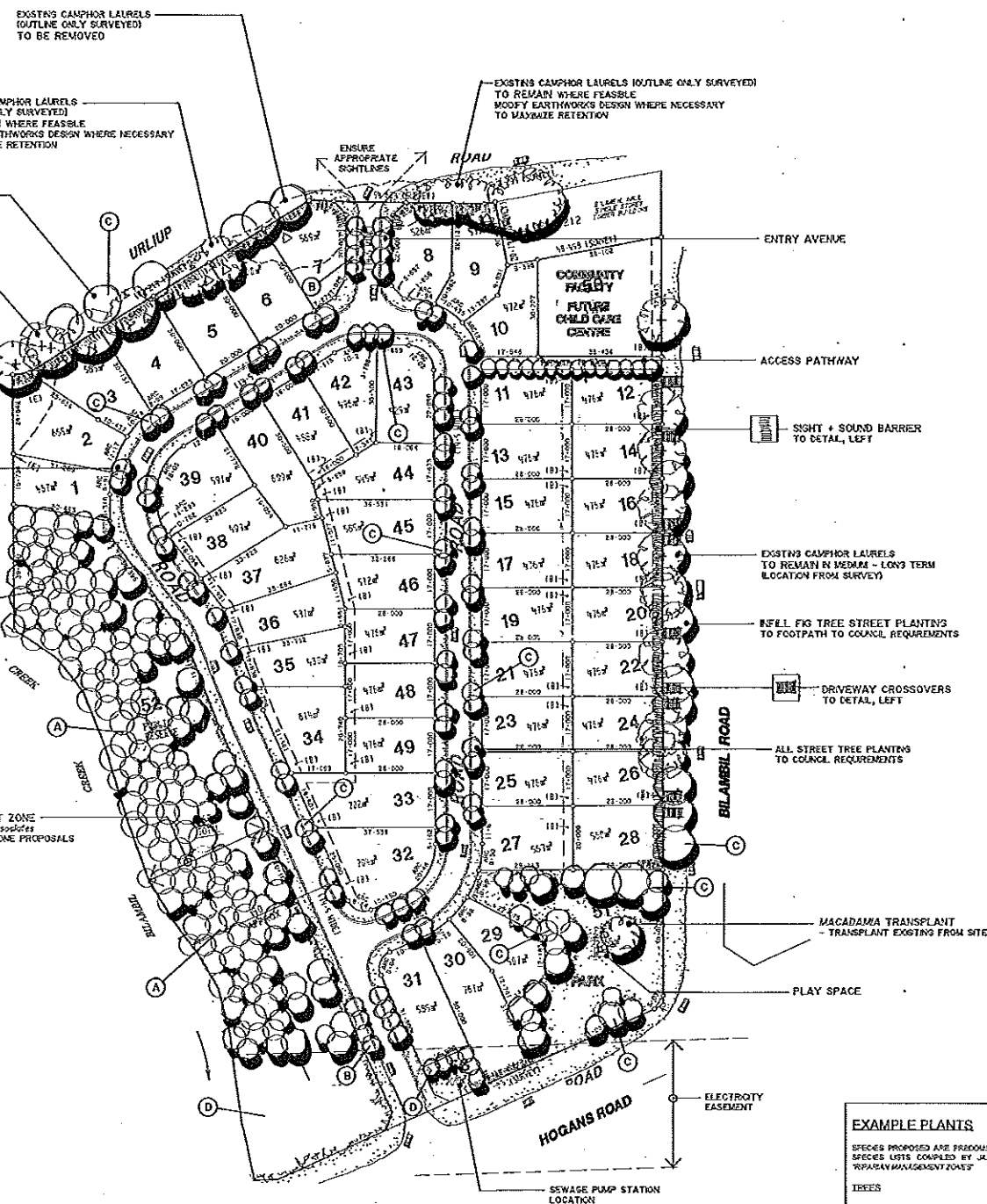
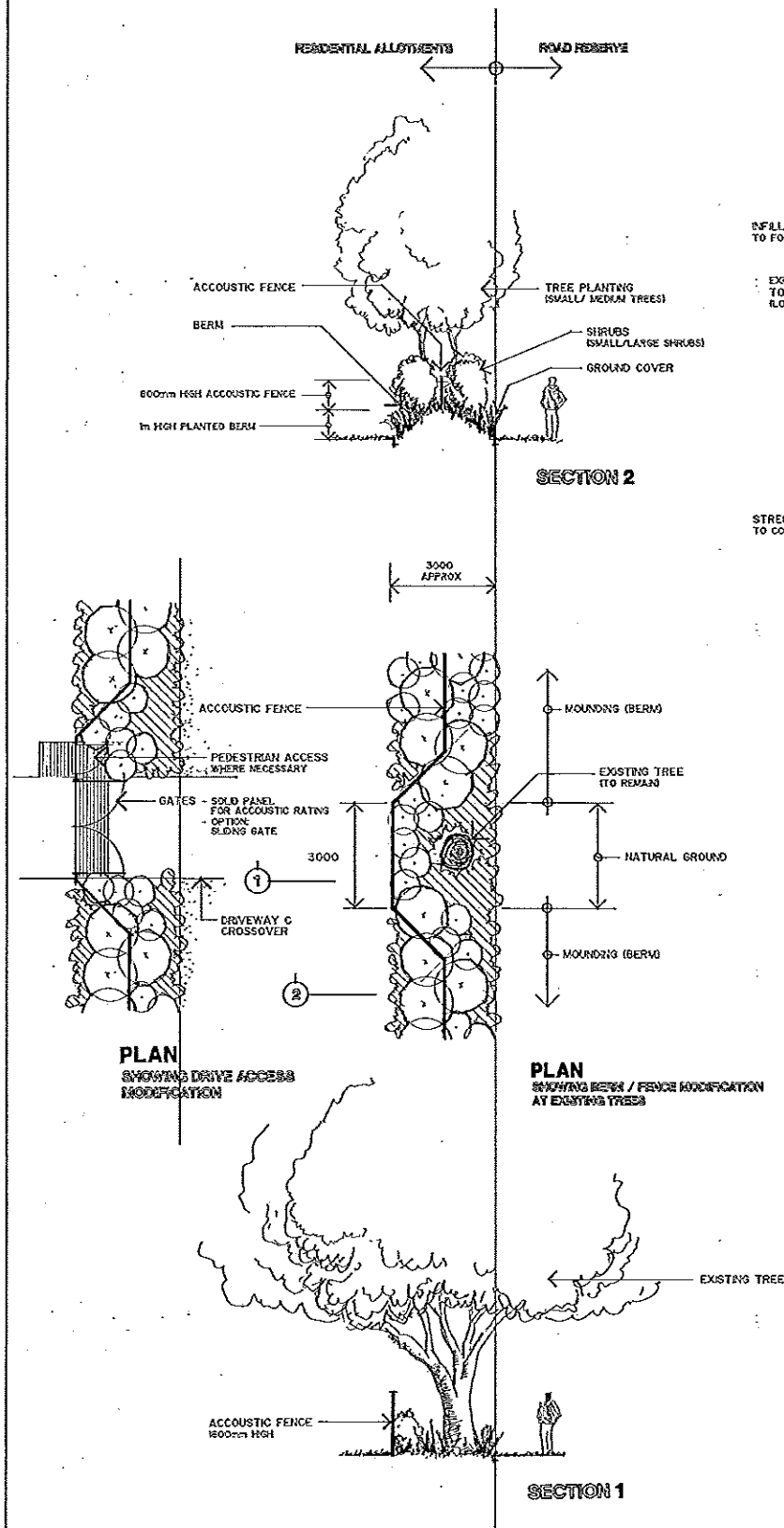
---

**ANNEXURE B      Amended Landscaping Plan Drawing No. A1.DD.3, Amendment B – Donald Irving  
and Andrew Gold Landscape Architecture, 24 February 2010**

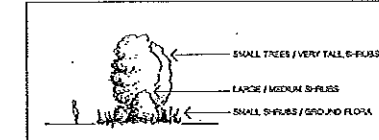
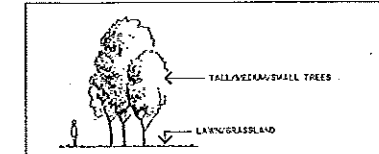
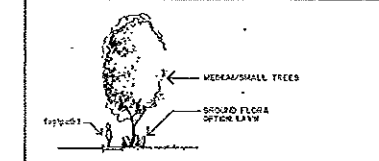
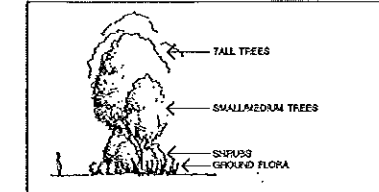
---

**Darryl Anderson Consulting Pty Ltd**

A.C.N. 093 157 165  
Town Planning & Development Consultants



# VEGETATION STRUCTURE



## EXAMPLE PLANTS

SPECIES PROPOSED ARE PREDOMINANTLY ENDemic AND BASED ON THE SPECIES LISTS COMPILED BY JAMES WARREN + ASSOCIATES UNDER 'RIPARIAN MANAGEMENT ZONES'

**TREES**

<i>Alphitonia excelsa</i>	red ash
<i>Coprosma aemuloides</i>	hickorio
<i>Commersonia bartramia</i>	brown humping
<i>Elaeagnus grandis</i>	blue humping
<i>Ficus virens</i>	Moreton Bay fig
<i>Jacquinia pseudocornuta</i>	lemon bark
<i>Moroneja laetifolia</i>	moroneja
<i>Podocarpus elata</i>	plum pine
<i>Syzygium floribundum</i>	weeping Myrtle
<i>Syzygium obscurum</i>	blue Myrtle

**SHRUBS**

<i>Agave arifolia</i>	common Myrtle
<i>Alphitonia excelsa</i>	native ginger
<i>Azalea speciosa</i>	red myrtle
<i>Banksia integrifolia</i>	grey myrtle
<i>Chorizanthe bartramia</i>	knock out rose
<i>Corymbia speciosa</i>	plum Myrtle
<i>Podocarpus elata</i>	native Myrtle
<i>Pittosporum tenuifolium</i>	native Myrtle
<i>Walteria speciosa</i>	white

**GROUND FLORA**

<i>Chorizanthe bartramia</i>	weeping Myrtle
<i>Dactyloctenium aegyptium</i>	blue Myrtle
<i>Diuris longifolia</i>	red Myrtle
<i>Hibiscus syriacus</i>	weeping Myrtle
<i>Gaillardia coccinea</i>	red Myrtle
<i>Lepidosiphon laetifolius</i>	variable red Myrtle
<i>Lomandra longifolia</i>	red Myrtle

AMT B, 24/2/00: DRIVE ACCESS ADDED (BLAMBL RD)  
AMT A, 24/2/00: PEDESTRIAN GATES ADDED



John Sherwood for  
**JACKSON INTERNATIONAL Pty Ltd**  
**Bilambil Residential Estate**  
Bilambil Road Lots 2 & 3 DP 244652 BILAMBIL, NSW  
**LANDSCAPE CONCEPT PLAN**  
A1.DD.3

Donald Irving AILA BSc International ASLA  
17 Lawton Street, Derry NSW 2117  
P 07 3309 5574  
F 07 3309 3768  
E don@bigpond.net.au



---

**ANNEXURE C      Email Correspondence Regarding the Stormwater Management Plan Between  
Mr Tom Fitzgerald, Mr Mick Denny and Campbell Leonard and Associates, Dated  
9 February 2010, 24 February 2010, 26 February 2010 and 2 March 2010**

---

**Darryl Anderson Consulting Pty Ltd**

A.C.N. 093 157 165  
Town Planning & Development Consultants

Sandra

**From:** Mail [mailto:mail@claconsultants.com.au]  
**Sent:** 2010-03-04 10:28 AM  
**To:** Sandra  
**Cc:** John Sherwood  
**Subject:** Fw: 08\_0034 Bilambil Village stormwater treatment  
**Attachments:** Additional Plan.pdf; Response.pdf; Marked up Drawing 002.pdf

Darryl,

As requested.

Regards

Campbell

----- Original Message -----

**From:** Thomas FitzGerald  
**To:** Campbell Leonard  
**Cc:** johnasherwood@optusnet.com.au  
**Sent:** Friday, January 22, 2010 2:28 PM  
**Subject:** 08\_0034 Bilambil Village stormwater treatment

Campbell, please find attached Council's response to your submission of the stormwater concept information. Note the Department of Planning concurs with this assessment and is satisfied with the information provided to date in regards to stormwater treatment and disposal.

Regards, Tom.

Tom FitzGerald  
 A/Senior Environmental Planner  
 Regional Projects - North Coast  
 NSW Department of Planning  
 23 - 33 Bridge Street Sydney NSW 2000  
 GPO Box 39 Sydney NSW 2001  
 www.planning.nsw.gov.au

P: 02 9228 6521 | F: 02 9228 6540



Please consider the environment before printing this email.

>>> Mick Denny <MDenny@tweed.nsw.gov.au> 22/01/2010 1:48 pm >>>  
 Tom

In regards to your email (below and the associated attachments) regarding stormwater treatment, Council provides the following comment.

Overall Council finds the attached documentation (in conjunction with previously submitted documentation) satisfactory for DA assessment. Detailed assessment of the proposal can be dealt with at Construction Certificate (CC) stage, including:

- 1 - In sizing the required culverts under Bilambil Road for catchment "B", the applicant will need to consider all associated external catchments. This would include the external catchment that I have anticipated in blue on the attached "Marked up" drawing. Again, this can be addressed at CC Stage.
- 2 - Council require the frontage of the development to Uriup Road to be upgraded to a standard urban profile (as should be enforced in the Imposed conditions). Hence the road verge will grade at 2.5% to the kerb and will not accommodate a grass swale (as suggested behind Los 3-5). However the opportunity to incorporate a swale could be considered at CC stage.
- 3 - Council will only support the utilisation of the existing open channel to treat runoff from Uriup Road if it can be shown that it provides the appropriate treatment in accordance with the requirements stipulated in Council's Design Specification D7 - Stormwater Quality. This can be assessed using MUSIC modelling (or the like) at CC Stage. If it is determined that inadequate channel length or grade is available, then the development will need to look at alternative treatments and may resort back to installing an end of line, oil, grit arrestor. Again, this can be assessed at CC stage.

In summary, what has been provided is consistent with what has been agreed to by Tweed Shire Council and can be deemed sufficient to determine the application in regards to stormwater treatment. Further details can be assessed at CC stage, subject to appropriate conditions being imposed.

If you require any further clarification on this matter, please contact me.

Kristin - Please register (DA09/0812)

Regards

**Mick Denny** | Senior Development Engineer  
 Planning and Regulation



P (02) 6670 2602 | F (02) 6672 6250 | e mdenny@tweed.nsw.gov.au | w www.tweed.nsw.gov.au  
 Civic and Cultural Centre Tumbulgum Road Murwillumbah NSW 2484 | PO Box 816 Murwillumbah NSW 2484 | ABN: 80 178 732 496

Customer Service: (02) 6670 2400 | 1300 292 872  
 Our values: transparency | customer focus | fairness | reliability | progressiveness | value for money | collaboration  
 Please consider the environment before printing this email. One tonne of paper is equivalent to 13 trees and 30 kl. of water



**From:** Thomas FitzGerald [mailto:Thomas.FitzGerald@planning.nsw.gov.au]  
**Sent:** Friday, 22 January 2010 12:36 PM  
**To:** Mick Denny  
**Cc:** Seth Phillbrook  
**Subject:** 08\_0034 Bilambil Village stormwater treatment

Hi Mick,  
 Attached please find a copy of the conceptual stormwater treatment and layout plan. Note there are three catchments indicated. Also attached is a summary of the concept stormwater for stormwater treatment proposed on-site. Please can you review and confirm whether this is consistent with what has been agreed to by Tweed Shire Council.

Kind regards, Tom.

Tom FitzGerald  
 A/Senior Environmental Planner  
 Regional Projects - North Coast  
 NSW Department of Planning  
 23 - 33 Bridge Street Sydney NSW 2000  
 GPO Box 39 Sydney NSW 2001  
 www.planning.nsw.gov.au

P: 02 9228 6521 | F: 02 9228 6540

04/03/10



Please consider the environment before printing this email.

>>> "Mail" <mail@claconsultants.com.au> 21/01/2010 2:50 pm >>>



CLA CONSULTANTS  
Consulting Civil/Structural Engineers, Project Managers

Tom,

Further to our earlier discussion, please find attached a marked up plan indicating catchments etc as requested. Also, I have included a commentary in response to your query.

Please peruse and call should you need additional information.

Thanks

Campbell...



Campbell Leonard  
FIEAust CP Eng NPER3 RPEQ  
Director

8/43 Tallebudgera Creek Road West Burleigh QLD 4219  
PO Box 403 West Burleigh QLD 4219  
Ph: (07) 5520 1066 Fax: (07) 5520 1077  
ABN 55 079 641 286

-----  
This message is intended for the addressee named and may contain confidential/privileged information. If you are not the intended recipient, Views expressed in this message are those of the individual sender, and are not necessarily the views of the Department.  
You should scan any attached files for viruses.  
-----

-----  
This email (including any attachments) is confidential and must only be used by the intended recipient(s) for the purpose(s) for which it has been sent. It may also be legally privileged and/or subject to copyright.  
-----

If you are not an intended recipient, any disclosure, distribution, copying or use of or reliance on this email (or any attachment) is strictly prohibited. If you have received this email in error, please promptly notify the sender by return email and then delete all copies of this email (and any attachments).

If you forward or otherwise distribute this email (or any attachment) you may be personally liable for a breach of confidentiality, an infringement of copyright, defamation or other legal liability.  
Any opinions, views or conclusions expressed in this email (or any attachment) are those of the individual sender and may not necessarily reflect the official position of the Council.  
[www.tweed.nsw.gov.au](http://www.tweed.nsw.gov.au)

-----  
This email has been scanned by the MessageLabs Email Security System  
-----

-----  
This message is intended for the addressee named and may contain confidential/privileged information. If you are not the intended recipient, Views expressed in this message are those of the individual sender, and are not necessarily the views of the Department.  
You should scan any attached files for viruses.  
-----

**Lots 1 & 2 Bilambil Road  
Bilambil**

- 1. The Site-Based Stormwater Management Report (Attachment 3 of the civil engineering report in Annexure G of the PPR) includes plans that do not show all treatment devices proposed. It is unclear from the plans as to how many discharge points there are (2?), and whether grass swales are proposed to filter runoff before it hits Bilambil Creek from the northern catchment of the development (due to it being a smaller catchment). Please provide a plan that clearly shows all stormwater catchments post-landforming (2 or 3 catchments?) and their ultimate discharge points. This plan should clearly indicate any other Water Sensitive Urban Design (WSUD) measures proposed across the development. The Department requires certainty that appropriate stormwater management will take place in the absence of any detailed ecological assessment of stormwater impacts, and due to a reduced Riparian Management Zone width (35m, normally 50m).*

**Response.**

The plans as submitted have been reviewed by the Tweed Shire Council and we are advised that the water quality management devices proposed satisfy the requirements of the LEP.

There are three discharge point from the project, as shown on our marked up drawing attached.

The runoff from the major catchment (marked "A" on the plan) is directed to Bilambil Creek. This runoff flows through the proposed water quality improvement device in accordance with Council's recommendation/requirements.

The outlet ("B" on the plan) discharges to an existing overland flow path on the Eastern side of Bilambil Road. There are no water quality improvement devices proposed at this point. It will be understood that Council's requirements in respect of the required upgrading works in Bilambil Road, ie in accordance with the specified cross section included in the drawings, preclude the construction of swales etc. Likewise, the construction of swales within the development site per se will not satisfy the relevant provisions of the LEP, on the basis that the longitudinal grades do not fall within the specified tolerances.

The outlet "C" (on the attached plan) drains to an existing open channel that currently serves as an outlet from the existing 1.5m Dia culvert under Urliup Road.

Council has advised that it does not require the installation of a GPT at the outlet of this catchment, but that it may be acceptable to construct swales in association with the proposed section in Urliup Road. Review of the existing situation highlights the difficulty with this approach.

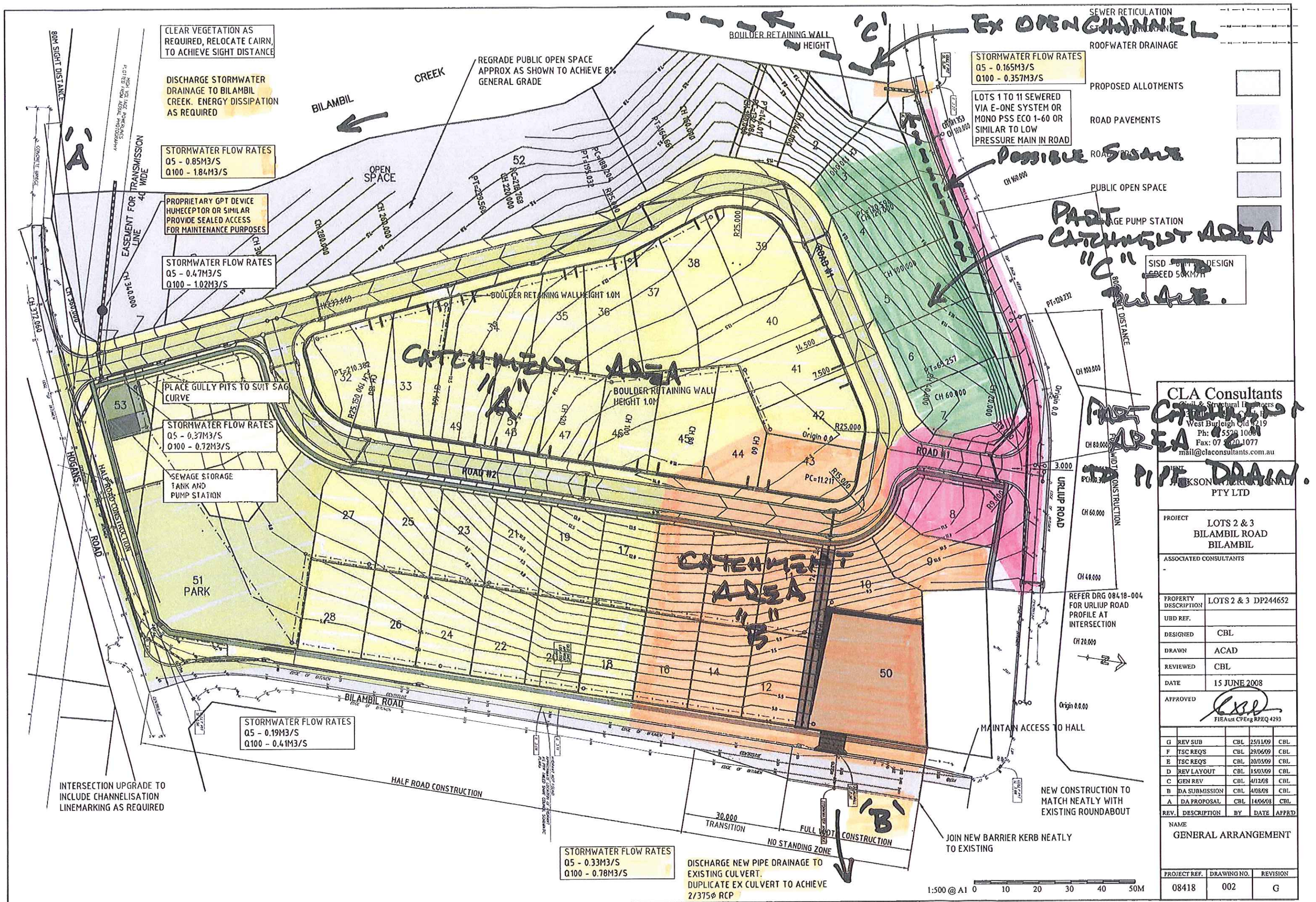
The longitudinal section of Urliup Road (refer drawing 08418-005 Rev E) shows the longitudinal grade at greater than 7% for a significant length. The discharge of the required pipe drainage to a swale in the footpath is problematic, however it would appear to be possible to provide a vegetated swale in the footpath to treat the runoff from Lots 3, 4, 5, 6 and 7. Thus, whilst it may not be possible to treat all of the runoff from Catchment "C", it is possible to treat a significant proportion.

The attached sketch summarises the three catchments and indicates the location of water quality improvement devices.

Campbell Leonard  
FIEAust CPEng NPER3  
Director

21/01/2010













---

**ANNEXURE D      Email Correspondence Regarding Retaining Walls Between Mr Tom Fitzgerald,  
Mr Mick Denny and Campbell Leonard and Associates, Dated 9 February 2010,  
24 February 2010, 26 February 2010 and 2 March 2010**

---

**Darryl Anderson Consulting Pty Ltd**

A.C.N. 093 157 165  
Town Planning & Development Consultants

**Sandra**

---

**From:** Mail [mailto:mail@claconsultants.com.au]  
**Sent:** 2010-03-02 03:18 PM  
**To:** John Sherwood  
**Cc:** Sandra  
**Subject:** Fw: Major Project Application 08\_0034 - Bilambil Village

John,

For your information.

Regards

Campbell

----- Original Message -----

**From:** Mick Denny  
**To:** 'mail@claconsultants.com.au'  
**Cc:** Seth Philbrook ; Danny Rose ; Rowena Michel  
**Sent:** Tuesday, March 02, 2010 1:35 PM  
**Subject:** Re: Major Project Application 08\_0034 - Bilambil Village

Campbell

In response to your email (dated 26/02/10), Council provides the following comment

Your proposal is acceptable provided;

- the first retaining wall is kept a minimum of 900mm off the property boundary (as shown),
- the individual retaining walls are no higher than 1200mm (as shown),
- the terracing is kept within the 45 degree window (as shown),
- each retaining wall is suitably screened with each terrace suitably screened to the satisfaction of the General Manager or delegate.
- appropriate drainage is provided for each terrace
- the maximum combination of retaining walls, batter and terracing does not exceed 5.0m

The application will be conditioned accordingly.

If you have any questions, please contact me

Regards

**Mick Denny** | Senior Development Engineer  
Planning and Regulation



p (02) 6670 2602 | f (02) 6672 6250 | e mdenny@tweed.nsw.gov.au | w www.tweed.nsw.gov.au  
Civic and Cultural Centre Tumbulgum Road Murwillumbah NSW 2484 | PO Box 816 Murwillumbah NSW 2484 | ABN: 90 178 732 496

Customer Service: (02) 6670 2400 | 1300 292 872  
Our values: transparency | customer focus | fairness | reliability | progressiveness | value for money | collaboration

Please consider the environment before printing this email. One tonne of paper is equivalent to 13 trees and 30 kL of water

---

**From:** Mail [mailto:mail@claconsultants.com.au]  
**Sent:** Friday, 26 February 2010 4:01 PM  
**To:** Mick Denny  
**Cc:** Darryl Anderson; John Sherwood  
**Subject:** Re: Major Project Application 08\_0034 - Bilambil Village

Mick,

Please find attached the proposal for the retaining scenario at the site. Note that this drawing has been forwarded to the Architect to provide details of appropriate design parameters.

It would be appreciated if you would provide confirmation that the proposal satisfies Council's DCP requirements.

03/03/10

Jenny

---

**From:** John Sherwood [johnasherwood@optusnet.com.au]  
**Sent:** Saturday, 27 February 2010 10:32 AM  
**To:** Jenny  
**Subject:** FW: Major Project Application 08\_0034 - Bilambil Village  
**Attachments:** Design Rev H RETAINING WALL (1).pdf

Hi Darryl. We should include this in our submission as the engineering solution to the retaining walls. We should however not include the plan of the CCCentre for the moment as we may seek relief from the constraints when we submit the DA for that at a later date. John

---

**From:** Mail [mailto:mail@claconsultants.com.au]  
**Sent:** Friday, 26 February 2010 4:01 PM  
**To:** Mick Denny  
**Cc:** Darryl Anderson; John Sherwood  
**Subject:** Re: Major Project Application 08\_0034 - Bilambil Village

Mick,

Please find attached the proposal for the retaining scenario at the site. Note that this drawing has been forwarded to the Architect to provide details of appropriate design parameters.

It would be appreciated if you would provide confirmation that the proposal satisfies Council's DCP requirements.

Thanks

Campbell Leonard

----- Original Message -----  
**From:** Mick Denny  
**To:** 'Mail'  
**Cc:** Seth Philbrook ; 'Thomas FitzGerald'  
**Sent:** Thursday, February 18, 2010 9:47 AM  
**Subject:** Major Project Application 08\_0034 - Bilambil Village

Campbell

Council will be enforcing that the earthworks associated with proposed allotment 50 (the childcare site) is undertaken during the subdivision works. As such, it is requested that critical / typical cross section are provided through each property boundary of Lot 50 (excluding the frontage to Bilambil Road) to show compliance with Council's DCP A5 and associated Development Design Specification D6 - Site Regrading.

Note, Table D6.1 limits retaining walls around the perimeter of the allotment to be no greater than 1.2m and must be located a minimum 0.9m horizontally from the boundary (incorporating any perimeter drainage - as required). D6 then allows terracing of retaining wall from this initial retaining wall within a 45 degree window to achieve a usable footprint.

Due to the extensive cu , this may have potential adverse impacts on lot 50, surrounding allotments (residential and the existing hall), drainage, overland flow and streetscape appearance, hence why it is required now. Appropriate landscaping along the top and toe of the retaining structures will also be require to soften the walls visual impact.

It has been requested by the DoP that this matter be resolved prior to determination of the application.

Council eagerly awaits your documentation for assessment.

1/03/2010



Jenny

---

**From:** John Sherwood [johnasherwood@optusnet.com.au]  
**Sent:** Wednesday, 24 February 2010 12:04 PM  
**To:** Jenny  
**Subject:** FW: Lots 2 & 3 Bilambil Road Bilambil

Hi Darryl  
,This is OK with us and can be used in the final PP Report  
John

---

**From:** Mail [mailto:mail@claconsultants.com.au]  
**Sent:** Wednesday, 24 February 2010 11:19 AM  
**To:** Tom Fitzgerald  
**Cc:** Mick Denny; Darryl Anderson; John Sherwood  
**Subject:** Lots 2 & 3 Bilambil Road Bilambil



Tom,

Further to your request for the clarification of the need for the construction of the 1m high internal retaining wall encompassing Lots 32 to 49 inclusive.

Being 1m or less, the wall is classed more as a landscaping feature than a retaining wall per se. The wall as designed fits under the requirements of Council's local environmental plan. The wall as proposed is in complete conformity with the Tweed Shire Council requirements. Indeed, the proposed height of the wall, at 1m is 55% of the acceptable height detailed in the LEP.

We have included the wall for two main reasons, as follows:

a) To reduce the volume of spoil to be removed from the site. If the level of the finished landform was reduced by 1m an additional 9,800m<sup>3</sup> approximately would need to be transported from the site. This equates to an increase in spoil of approximately 50%. A similar saving could be achieved by the replacement of the proposed wall with a batter at say 1V:4H, but it would be understood that as the batter would need to be contained within the private property, this would equate to the loss of a strip of land 4m wide around the perimeter (approximately 430m<sup>2</sup>) from the area of useable land available (approximately 5%).

b) To reflect, somewhat, the shape of the existing landform within the bounds of practicability whilst being in conformity with the requirements of the LEP.

We trust that you find the above satisfactory. Please contact the undersigned should you require additional information in relation to this matter.

Regards

...

24/02/2010



Campbell Leonard  
FIEAust CPEng NPER3 RPEQ  
Director

8/43 Tallebudgera Creek Road West Burleigh QLD 4219  
PO Box 403 West Burleigh QLD 4219  
Ph: (07) 5520 1066 Fax: (07) 5520 1077

ABN 55 079 641 286