



DARRYL ANDERSON CONSULTING PTY LTD

TOWN PLANNING & DEVELOPMENT CONSULTANTS

MODIFICATION OF MAJOR PROJECT APPROVAL NO. 06_0243

**PROPOSED RESIDENTIAL SUBDIVISION
AT LOT 9 DP 1039569 AND LOT 2 DP 100385
FRASER DRIVE, TWEED HEADS SOUTH**

PREPARED FOR:

GREENVIEW DEVELOPMENTS PTY LTD

PREPARED BY:

DARRYL ANDERSON CONSULTING PTY LTD

MAY 2010

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

Ph: 07 55233611
Fax: 07 55233612
Email: admin@daconsulting.com.au

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MODIFICATION OF MAJOR PROJECT APPROVAL NO. 06_0243

PROPOSED RESIDENTIAL SUBDIVISION AT FRASER DRIVE, TWEED HEADS SOUTH

1.0 INTRODUCTION

Greenview Developments Pty Ltd (the owner of the land) has commissioned Darryl Anderson Consulting Pty Ltd to prepare an application for modification of Major Project Approval No. 06_0243 which relates to a residential subdivision.

2.0 MAJOR PROJECT APPROVAL

On 4 November 2008 the Minister for Planning granted Project Approval No. 06_0243 for the carrying out of:

- i. Boundary adjustment and subdivision of the site into two master lots;
- ii. Residential subdivision in six stages to create 151 freehold title lots that will provide for attached and detached dwellings, and the creation of a 1.57 hectare "superlot" for a future integrated housing development comprising of strata or community titled subdivision.

A copy of the Project Approval and proposed Subdivision Plans as approved is contained at **Annexure B**. The applicant/proponent in respect of the application was the Geo Property Group, however that company is no longer involved in the project. The Project Approval has been reviewed on behalf of the owners of the land following which a number of anomalies and issues have been identified which require modification to enable the project to proceed on a viable basis.

Details of the proposed modifications are contained in Section 4.0 of this Report.

3.0 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT AND REGULATIONS

Section 75W of the Act facilitates the lodgement and determination of an application to modify a Part 3A approval. Section 75W is in the following terms:

"Modification of Minister's approval

75W

- (1) *In this section:*

Minister's approval means an approval to carry out a project under this Part, and includes an approval of a concept plan.

Modification of approval means changing the terms of a Minister's approval, including:

- (a) *revoking or varying a condition of the approval or imposing an additional condition of the approval, and*
 - (b) *changing the terms of any determination made by the Minister under Division 3 in connection with the approval.*
- (2) *The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.*
- (3) *The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.*
- (4) *The Minister may modify the approval (with or without conditions) or disapprove of the modification.*

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- (5) *The proponent of a project to which Section 75K applies who is dissatisfied with the determination of a request under this section with respect to the project (or with the failure of the Minister to determine the request with 40 days after it is made) may, within the time prescribed by the regulations, appeal to the Court. The Court may determine any such appeal.*
- (6) *Subsection (5) does not apply to a request to modify:*
(a) an approval granted by or as directed by the Court on appeal, or
(b) a determination made by the Minister under Division 3 in connection with the approval of a concept plan.
- (7) *This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan."*

Currently there are no regulations of relevance to a modification application.

4.0 PROPOSED MODIFICATIONS

4.1 Amended Subdivision Layout Plans

The subdivision layout has been amended to address anomalies in the consent and make minor amendments to the layout. The amended Plans of Proposed Subdivision is contained at **Annexure C**. The key changes to the approved plan are summarised as follows:

- ♦ Numbering all allotments including open space allotments and the future integrated housing site.
- ♦ Creation of a separate lot over the battleaxe handle between proposed Lot 156 and Ocean Avenue to enable the axe handle to be sold to the adjoining owner of Lot 17 Section 11 DP 28390 and consolidated with that allotment. The adjoining owner has provided written advice that they are prepared to purchase the battleaxe handle. A copy of that advice is contained at **Annexure F**. Under the current approved plan, the battleaxe handle forms part of Lot 156 however it serves no practical purpose for that lot and cannot be used as access because of gradient constraints. The amended plan is at **Annexure C**.
- ♦ In accordance with Condition B1 amendment of the layout has occurred to create proposed Lot 2 for local shops.
- ♦ Increasing the area of proposed Lot 11 (B&P Surveys Drawing No.12152B Rev B) to provide a drainage corridor as required by Condition B18.
- ♦ New pathways adjacent to Lots 97/98, 107/108 and 114/115.

The changes compared to the Conics Drawing No. 20935-5o (Approved Plan) are summarised as follows:

STAGE 1A

- ♦ Lot numbering amended;
- ♦ Total lot number of residential reduces from 12 to 9 ;
- ♦ Now includes the future integrated housing lot - Lot 15;
- ♦ Now includes local shops - Lot 2 - 2500m²;
- ♦ Battleaxe handle will be Lot 12 part of Stage 1(see Drawing No.12512B Rev B);
- ♦ Same number of duplex lots in same position;
- ♦ Lot No. 16 given to water quality / open space;
- ♦ Road widening removed from stage (now a separate action – see "overall staging");
- ♦ Overall stage area increased.

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STAGE 1B

- ♦ Lot numbering unchanged;
- ♦ New pathway and overland flow path between Lots 97 and 98 and area amended accordingly ;
- ♦ Bin Pad Location in front of lots 95 and 160 made clearer.

STAGE 2A

- ♦ Lot numbering unchanged;
- ♦ Pathway and overland flow path between lots 80 and 81 and area amended accordingly ;
- ♦ Bin Pad Location in front of Lot 72 made more clear;
- ♦ Road widening removed from stage (now a separate action – see "overall staging").

STAGE 2B

- ♦ Stage Boundary changed (previous Lots 112-116, 118 and 146 had no constructed road frontage);
- ♦ Number of residential lots decreased from 26 to 19;
- ♦ Lot numbering changed to suit stage boundary amendment;
- ♦ Pathway and overland flow path between Lots 107 and 108 and areas amended accordingly;
- ♦ Overall stage area decreased due to stage boundary change;
- ♦ SEPP 14 (Lot 164) area given lot number;
- ♦ Road widening removed from stage (now a separate action – see "overall staging");
- ♦ Pathway and overland flow path between Lots 151 and 152 and areas amended accordingly.

STAGE 3A

- ♦ Total number of residential lots reduces from 33 to 31;
- ♦ Stage boundary amended around shop site;
- ♦ Duplex lots in same position except duplex Lot 22/23 adjacent Fraser Drive. Can move to alternative position if required;
- ♦ Overall stage area decreased ;
- ♦ Road widening removed from stage (now a separate action – see "overall staging");
- ♦ Bin Pad Location in front of Lot 29 made more clear;
- ♦ Lot No. (57) given to Public Reserve;
- ♦ Public Reserve area slightly smaller, due to final lot calculations (50m2) and required cul-de-sac head size.

STAGE 3B

- ♦ Stage boundary changed (See Stage 2B);
- ♦ Number of Residential Lots increased from 27 to 34;
- ♦ Lot numbering changed;
- ♦ Strip of land leading from Champagne Drive to open space changed from right of way access to open space and area amended accordingly (Part of Lot 166);
- ♦ Road widening removed from stage (now a separate action – see "overall staging");
- ♦ Lot numbers given to open space (Lots 165 and 166);
- ♦ Public Reserve area (Lot 165) increased from 3759m2 to 3832m2;
- ♦ Public Reserve area (Lot 166) increased from 3632m2 to 5165m2;
- ♦ Bin Pad location in front of Lot 165 made clearer;
- ♦ Pathway and overland flow path between Lots 114 and 115 and areas reduced accordingly.

OVERALL CHANGES

- ♦ All areas amended to reflect latest lot calculations;
- ♦ Total number of residential lots now 145 ;
- ♦ Total number of dwellings now 159 which includes a dwelling for the Integrated houses site (Lot 15);

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- ♦ The Residential lot Summary does not include the shop site (Lot 2) and the future Integrated Housing Site (lot 15);
- ♦ Over all boundary line amended to assume overland flow area has been acquired from Sullivan's (Lot 2 in DP1000385);
- ♦ Overall property boundary line amended to include battleaxe lot - Ocean Avenue.
- ♦ 10m road widening shown as a separate action and not included in any stages. This is because the timing of the dedication of the widening is dependant upon closing Champagne Drive within Stage 3B.

Amendment to the subdivision layout gives rise to a requirement for to modify a number of consent conditions as follows:

4.2 Schedule 1 – Part A Table

Amend the description of the development as follows:

- ♦ Lot 2 DP 100385 be amended to Lot 2 DP 1000385.
- i. Boundary adjustment and subdivision of the site into two master lots and separation of battleaxe handle for future consolidation with Lot 17 Section 11 DP 28392;
- ii. Residential subdivision in six stages to create 145 residential lots, five open space lots, a local shop lot and a future integrated housing lot. The total number of dwellings will be 159 which includes one dwelling allowance for the integrated housing site being Lot 15. This lot will be the subject of a future integrated housing development comprising of strata or community title subdivision.

4.3 Condition A1 – Project Description

Amend Condition A1 as follows:

Project approval is granted only to carrying out the project described in detail below:

- 1) Boundary adjustment of Lot 2 in DP 1000385 and Lot 9 in DP 1039569 (Drawing No. 12512B, Rev B);
- 2) Subdivision of Lot 9 in DP 1039569 into two master lots (Lot 1 and Lot 2 of the subdivision, Drawing No. 16104B, Rev A);
- 3) Subdivision of Master Lot 1 into 72 residential lots in 3 stages;
- 4) Subdivision of Master Lot 2 into 73 residential lots in 3 stages;
- 5) Creation of a 1.54ha super lot for a future integrated housing development (Lot 15);
- 6) Creation of an open space lot that contains an artificial wetland for the purposes of stormwater management (Lot 16);
- 7) Creation of an open space lot for the retention of the SEPP14 Wetland and buffer area (Lot 164);
- 8) Dedication of a 10m wide strip for the future widening and upgrade of Fraser Drive;
- 9) Site rehabilitation works to stabilise current land slip hazards;
- 10) Construction of roads, revetment structures and drainage infrastructure;
- 11) Creation of open space Lots 57, 165 and 166; and,
- 12) Creation of a local shops lot (Lot 2).

4.4 Condition A2 - Staging

Amend Condition A2 as follows:

The project is to be constructed in six (6) stages, generally as follows:

- (1) Stage 1 comprises:
 - (a) Boundary adjustment of Lot 2 in DP1000385 and Lot 9 in DP 1039569, Fraser Drive, South Tweed and road widening;
 - (b) Subdivision of Lot 9 in DP 1039569 into two master lots (Master Lot 1 and Master Lot 2); and
 - (c) Separation of battleaxe handle for future consolidation with Lot 17 Section 11 DP 28392.

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Master Lot 1 is to be subdivided in three (3) stages:

- (2) Stage 1A has an area of 4.78 hectares comprising (Lots 2 to 16):
- (a) A 1.54ha integrated housing superlot (Lot 15);
 - (b) 6 low density residential allotments;
 - (c) 3 duplex allotments;
 - (d) 1.712ha of water quality open space (Lot 16);
 - (e) 1767m² drainage reserve from lot 16 to Fraser Drive
 - (f) 291m of 18m wide road (Road No.1 & Road No.2);
 - (g) 44m of 15m wide road (Road No.1 & Road No.2);
 - (h) Trunk drainage works between Fraser Drive and James Road;
 - (i) A four-way signalised control intersection at the northern development access to the Fraser Drive, including a 20m left turn lane and right turn lane on Fraser Drive; and
 - (j) A local shop (Lot 2).
- (3) Stage 2A has an area of 2.48 hectares comprising (Lots 58-90):
- (a) 32 low density residential allotments (Lots 60-90);
 - (b) 1 duplex allotment (2 dwellings);
 - (c) 333m of 13m wide road (Road No.1).
- (4) Stage 3A has an area of 2.79 hectares comprising (Lots 17-57):
- (a) 22 low density residential allotments;
 - (b) 9 duplex allotments (18 dwellings);
 - (c) 2217m² of park and recreation (functional) open space (Lot 57);
 - (d) 81.6m of 13m wide road;
 - (e) 349m of 15m wide road (Road No.2); and,
 - (f) 81.6m of 13m wide road.

Master Lot 2 is to be subdivided in three (3) stages:

- (5) Stage 1B has an area of 5.71 hectares comprising (Lots 91-103 and 157-163):
- (a) 20 low density residential allotments;
 - (b) 334m of 13m wide road (Road No.3); and,
 - (c) Right of carriageway access to Lots 159-160.
- (6) Stage 2B has an area of 9.75 hectares comprising (Lots 104-112 and 147-156 and 164):
- (a) 19 low density residential allotments;
 - (b) 6.48 hectares of SEPP14 wetland open space conservation area (Lot 164);
 - (c) 392m of 13m wide road (Road No.3); and,
 - (d) Right of carriageway access to Lots 154-156.
- (7) Stage 3B has an area of 6.48 hectares comprising (Lots 112-146 and 165-166):
- (a) 34 low density residential allotments;
 - (b) 5165m² of park and recreation (functional) open space (Lot 166);
 - (c) 3832m² of water quality/open space (Lot 165);
 - (d) 616m of 13m wide road (extension of Merlot Court); and,
 - (e) 69m of 18m wide road (Road No.4).

It is noted that staging of allotment construction may vary in timing according to market forces. Essential infrastructure shall be constructed as specified in the staging listed above.

4.5 Condition A3 – Project in Accordance With Plans

Amend Condition A3 as follows:

The project will be undertaken in accordance with the Environmental Assessment, the Preferred Project Report and the following drawings:

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ENGINEERING DRAWINGS PREPARED BY CARDNO (QLD) PTY LTD			
Drawing No.	Revision	Name of Plan	Date
7214/29/01-DA01	-	Site Plan	18 August 2008
7214/29/01-DA02	-	Existing Features and Constraints Plan	18 August 2008
7214/29/01-DA04	-	Proposed Finished Surface Contours Plan	18 August 2008
7214/29/01-DA05	-	Site Sections – Sheet 1	18 August 2008
7214/29/01-DA06	-	Site Sections – Sheet 2	18 August 2008
7214/29/01-DA07	-	Site Sections – Sheet 3	18 August 2008
7214/29/01-DA08	-	Slope Analysis Layout Plan	18 August 2008
7214/29/01-DA09	-	Cut and Fill Depth Contours Layout Plan	18 August 2008
7214/29/01-DA10	-	Erosion and Sediment Control Plan	18 August 2008
7214/29/01-DA11	-	Road Layout Plan	18 August 2008
7214/29/01-DA12	-	Longitudinal Section Road No. 1	18 August 2008
7214/29/01-DA13	-	Longitudinal Section Road No. 2 and Laneway No. 1	18 August 2008
7214/29/01-DA14	-	Longitudinal Section Road No. 2 and Merlot Court	18 August 2008
7214/29/01-DA15	-	Longsection Section Road No. 3	18 August 2008
7214/29/01-DA16	-	Longsection Section Road No. 3	18 August 2008
7214/29/01-DA17	-	Longsection Section Road No. 4 and Road No. 5	18 August 2008
7214/29/01-DA18	-	Typical Road Cross Sections	18 August 2008
7214/29/01-DA19	-	Pre Development Stormwater Network	18 August 2008
7214/29/01-DA22	-	Proposed Sewer Reticulation Network	18 August 2008
7214/29/01-DA23	-	Proposed Water Reticulation Network	18 August 2008
7214/29/01-DA24	-	Combined Services Plan	18 August 2008
7214/29/01-DA26	-	Service Vehicle Turn Paths	18 August 2008
7214/29/01-DA27	-	Proposed Pedestrian Linkage Footpath and Bus Stop Locations	18 August 2008
7214/29/01-DA28	-	Proposed Traffic Calming for Road 3	18 August 2008
7214/29/01-DA30	-	Site Sections Along Western Boundary	18 August 2008
7214/29/01-DA31	-	Road No. 3 Elbow Detail	18 August 2008
LANDSCAPE DRAWINGS PREPARED BY CONICS			
Drawing No.	Revision	Name of Plan	Date
71887_SD_2.01	-	Landscape Concept Plan	August 2008
71887_SD_2.02	-	Entry Statement Concept Plan and Elevations	August 2008
71887_SD_2.03	-	Park A Concept Plan and Character Images	August 2008
71887_SD_2.04	-	Park B Concept Plan and Character Images	August 2008
71887_SD_2.05	-	Seaview Park Concept Plan Section and Character Images	August 2008
71887_SD_2.06	-	Streetscape Types – Typical Sections	August 2008
71887_SD_2.07	-	Fraser Drive Streetscape and Boundary Fence Details and Character Images	August 2008
71887_SD_2.08	-	Proposed Plant Palette	August 2008

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SURVEY DRAWINGS PREPARED BY B & P SURVEYS			
Drawing No.	Revision	Name of Plan	Date
17975 D	Rev A	Location Survey of Midden Site at the Intersection of Fraser Drive and Champagne Drive, Tweed Heads South	30 January 2008
16104 B	-	Proposed Subdivision of Proposed Lot 11, Fraser Drive, Tweed Heads South	26 February 2010
12512 B	Rev B	Proposed Boundary Adjustment of Lot 2 in DP 1000385 and Lot 9 in DP 1039569 Fraser Drive, Tweed Heads South	23 February 2010
17900 B	Rev C	Proposed Subdivision Fraser Drive, Tweed Heads South	19 May 2010
DRAWINGS PREPARED BY VKL CONSULTING			
Drawing No.	Revision	Name of Plan	Date
5536-10-SW1	-	Post Development Stormwater Network	Undated
5536-10-SW2	-	Post Development Stormwater Catchment	Undated
DRAWINGS PREPARED BY GILBERT AND SUTHERLAND			
Drawing No.	Revision	Name of Plan	Date
GJ0878.3.6	-	Wetland Layout	12 March 2010
GJ0878.3.7	-	Cross Sections of Wetland Area	11 March 2010
GJ0878.3.8	-	Typical Constructed Wetland Details	15 December 2009

4.6 Condition A4 – Project in Accordance With Documents

Amend the condition by inserting after Clause (2):

(3) Modification Report prepared by Darryl Anderson Consulting Pty Ltd, dated February 2010.

4.7 Condition B1 – Local Shops

The local shops site is shown on the amended Subdivision Plan (Lot 2) at **Annexure B** and is adequately justified by the Retail Analysis at **Annexure E**. Therefore Condition B1 is superfluous and accordingly deletion of the condition is requested.

4.8 Condition B2 – Noise Attenuation

This condition requires a revised Acoustic Assessment to be submitted prior to the issue of a Construction Certificate for any stage. However, as the report could have implications for the layout, it has been completed as part of this Modification Application. A copy of the revised report is attached at **Annexure D**. In summary, the report discusses road traffic noise and commercial noise in the following terms:

"7.1 Road Traffic Noise

Road traffic noise has been assessed against the ten year planning horizon after the completion of the development, and takes into account the impact of traffic on Fraser Drive. Based upon year 2019 traffic volumes, traffic noise levels are predicted to impact the proposed subdivision at levels above the adopted road traffic noise criterion; hence acoustic treatments are required.

The adopted criterion has been sourced from the NSW EPA "Environmental Criteria for Road Traffic Noise" (ECRTN) and relates to "new residential developments affected by freeway / arterial traffic noise". We note that the above criterion as presented in the ECRTN refers to internal layouts, building materials and construction as methods for minimising road traffic noise impacts (for when the noise criteria is already exceeded).

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This assessment has explored available acoustic treatment options which are suitable (reasonable and achievable) for the development site and has provided recommendations for a balanced acoustic treatment outcome as a balanced treatment strategy is supported by both the ECRTN (refer to Section 3.6 of the document); and the NSW Department of Planning document "Development near Rail Corridors and Busy Roads – Interim Guideline" (refer to Section 3.8 of the document). Final acoustic recommendations which include acoustic barriers, acoustic building shell treatments and appropriate locations of private open recreation spaces not only provide a balance of reasonable and achievable options but is also considered the preferred option for the following site specific reasons:

- ♦ *The lot layout is constrained due to the site topography and the parcel of land is an infill site.*
- ♦ *We note that lots requiring upgraded building shell treatments are limited to approximately 12% of the overall number of lots proposed (i.e. 20 of 163 lots); hence 88% of the proposed lots require standard building shell treatments only due to setback buffer distance providing sufficient noise mitigation.*
- ♦ *The topography of the site (land rises up from Fraser Drive) limits the overall performance of acoustic barriers; with barriers able to provide screening to top floor levels of dwellings (if constructed) would need to be in the order of 8m in height.*
- ♦ *A 3.3m to 4.5m or a 6m to 7m high acoustic barrier along the Fraser Drive frontage would have negative impacts on other urban planning issues such as visual amenity, streetscape, loss of breezes, passive surveillance along Fraser Drive and the early morning and afternoon shadows cast by such a barrier.*
- ♦ *A 6m to 7m high barrier would also not be achievable due to costs associated with its construction and engineering (i.e. footing depth and wind loadings).*
- ♦ *The recommended treatments are in-keeping with the existing built environment along Fraser Drive (i.e. residential dwellings both to the north, south and southeast of the subject site) given that the proposed development is an infill site. Such built forms include a limitation of barrier height to 2m (i.e. a residential sub-division to the southeast of the subject site) and no acoustic barrier for those dwellings directly to the north and south of the site.*
- ♦ *CRG Traffic and Acoustical Consultants have undertaken a number of similar developments in Northern New South Wales which have had similar approved recommended acoustic treatments."*

The report contains the following recommendations:

"6.0 RECOMMENDED ACOUSTIC TREATMENTS

6.1 Road Traffic Noise Acoustic Treatments:

6.1.1 Acoustic Barriers

For strict compliance at ground floor level facades at all lots an acoustic barrier fronting Fraser Drive would have to be in the order of 3.3m to 4.5m in height. For strict compliance at ground and first floor level facades at all lots an acoustic barrier fronting Fraser Drive would have to be in the order of 6m to 7m in height.

A 3.3m to 4.5m or a 6m to 7m high acoustic barrier along the Fraser Drive frontage would have negative impacts on other urban planning issues such as visual amenity, streetscape, loss of breezes, passive surveillance along Fraser Drive and the early morning and afternoon shadows cast by such barriers. A 6 to 7m high barrier would also not be achievable due to costs associated with its construction and engineering (i.e. footing depth and wind loadings). For these reasons an alternative barrier solution has been adopted.

In-keeping with the existing built environment along Fraser Drive (i.e. residential dwellings both to the north, south and southeast of the subject site) given that the proposed development is an infill site we have recommended a maximum acoustic barrier height of 2.0m along the Fraser Drive frontage.

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The recommended location of the 2.0m high acoustic barriers is presented in Sketch 2 of Appendix A. Barriers are to be constructed above the finished ground or existing ground, whichever is higher and be free of gaps and holes. Typical materials include earth berms, 19mm lapped timber fence (40% overlap), 6mm FC sheet, masonry, or a combination of the above (a minimum surface mass of 11kg/m² is required).

6.1.2 Building Treatments

Based upon the noise modelling (Refer to Table 7 of Section 5.1.3), traffic noise is predicted to exceed the external noise criterion at the nearest proposed lots; hence further acoustic treatments are required.

To determine the extent of acoustic treatments, assessment of habitable spaces (i.e. bedrooms and living/dining/kitchen areas) should be undertaken in accordance with Australian Standard AS3671:1989 "Acoustics – Road traffic noise intrusion – Building Siting and Construction" to achieve the "maximum" internal noise levels prescribed in AS/NZS 2107:1987 "Acoustics – Recommended Design Sound Level and Reverberation Times for Building Interiors" – refer to Section 4.1.

Based upon predicted impact levels at lot building fa des (refer to Table 7 of Section 5.1.3), the TNR values (Traffic Noise Reduction) as defined in AS3671:1989 are as follows:

Receiver	Space	Impact dB(A)	Criteria dB(A)	TNR dB(A)
First Floor Living Areas	Lots 22 to 30, 71 and 125 to 134	72.0	45	27.0
First Floor Bedrooms	Lots 22 to 30, 71 and 125 to 134	67.0	40	27.0

Table 14: TNR values for noise affected habitable rooms.

TNR values between 10 and 25 (Lot building fa des which are presented in Bold within in Table 7 of Section 5.1.3) are considered as Construction Category 2 within AS3671:1989, which is defined as follows:

"Standard construction, except for lightweight elements such as fibrous cement or metal cladding or all glass faades."

Australian Standard AS3671:1989 also provides guidance on standard building construction for those lots with TNR values between 10 and 25:

Fraser Drive Space	Building Component	Rw	Indicative Acoustic Treatment **Verify with supplier proposed element achieves required Rw**
Standard Building Construction:			
Lots predicted to have TNR values up to 25	Glazing	24	4mm glass in a standard grade frame
	External Wall	33–35	Conventional timber stud framed wall, clad externally with 9mm thick timber or hardboards or flat cellulose-cement sheets and internally with 10mm thick plasterboard; or conventional brick veneer construction
	Roof/Ceiling	33-35	Conventional pitched roof with tiles or corrugated metal, over 10mm thick plasterboard

Table 15: Standard Building Shell Treatments.

TNR values between 25 and 35 (refer to Table 14 on the previous page) are considered as Construction Category 3 within AS3671:1989, which is defined as follows:

"Special construction, chosen in accordance with Clause 3.4. Windows, doors and other openings must be closed."

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Hence, to achieve the internal noise criterion at habitable rooms of future dwellings on lots with a TNR values greater than 25 (refer to Table 14 on the previous page), we recommend that additional noise assessments be conducted once building plans are finalised.

Assessment of habitable rooms should be undertaken in accordance with Australian Standard AS3671:1989 'Acoustics – Road traffic noise intrusion – Building Siting and Construction' to achieve the maximum internal noise levels prescribed in AS/NZS 2107:1987 'Acoustics – Recommended Design Sound Level and Reverberation Times for Building Interiors'. To allow occupants to close windows and doors and still have a supply of fresh air, provision of air conditioning or sealed mechanical ventilation is required to noise affected habitable rooms.

We note that lots requiring upgraded building shell treatments are limited to approximately 12% of the overall number of lots proposed (i.e. 20 of 163 lots); hence 88% of the proposed lots require standard building shell treatments only due to setback buffer distance providing sufficient noise mitigation.

6.1.3 External Private Open Spaces

An option to achieve the criterion at private open spaces on lots affected by traffic noise above the external daytime criterion of 55 dB(A) (refer to Table 7 of Section 5.1.3) is to locate such areas at ground level and along the western facing dwelling facades allowing for partial or full physical screening of traffic noise by the building envelope.

Hence, for noise affected lots, the additional acoustic assessments (discussed in Section 6.1.2 above) would also need to consider the location of external private open spaces to ensure the external noise criterion can be achieved at these areas.

6.2 Recommended Acoustic Treatments for Onsite Commercial Activity

Based upon the assumed commercial noise source levels, the following acoustic treatments and management principles are recommended to mitigate onsite commercial noise emissions should Local Shop development proceed:

- Construction of the 1.8m high acoustic barriers as detailed in Sketch 1 of Appendix A. Barriers are to be constructed above the finished ground or existing ground, whichever is higher and be free of gaps and holes. Typical materials include earth berms, 19mm lapped timber fence (40% overlap), 6mm FC sheet, masonry, or a combination of the above (a minimum surface mass of 11kg/m² is required).
- Awnings above alfresco dining areas be of a solid construction, and be free of holes or gaps to mitigate noise intrusion to unit dwellings above.
- Commercial hours of operation be limited to 7am to 10pm.
- Waste collection and deliveries be limited to the daytime period of 7am to 6pm.
- Driveway and carpark areas of the Local Shops be finished with surface coatings which prevent tyre squeal (an uncoated surface is acceptable). Drainage grating over trafficable areas be well secured to prevent rattling.
- Mechanical plant at the general store be designed and installed to comply with the noise criterion presented in Section 4.2. As final plant selection has not been completed, additional acoustic assessment/s should be undertaken once plant selections are finalised. Such assessments should be undertaken prior to Building Approval; and be conditioned within the Development Approval."

The recommendations will be complied with in the preparation of future Construction Certificate Applications and Development Applications for the local shops. In addition, the amended Layout Plan is generally consistent with the Acoustic Report.

Accordingly, amendment of Condition B2 is requested as follows:

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Amended Condition B2 – Noise Attenuation

The project shall be carried out in accordance with the Environmental Noise Impact Report prepared by CRG Pty Ltd and dated 17 February 2010.

4.9 Condition B16 – Signalised Intersection

Following the issue of the project approval further discussions have been held with Tweed Shire Council concerning the impact on stormwater drainage arising from the future levels of Fraser Drive. Council requires the level of the signalised intersection required pursuant to Conditions B16 and B17 to be of sufficient height to serve as an escape route in a PMF event.

The Engineering Report at **Annexure H** addresses this requirement and the implications for the approved stormwater drainage design.

In summary, Condition A3 will require amendment to delete reference to Drawings 7214/29/01-DA20 and DA21 and replace them with the drawings contained in **Annexure H**. These changes have been incorporated into the amended Condition A3 referred to at Section 4.5 above.

In addition, it will also be necessary to amend Condition B16 to include the following:

The stormwater drainage design of the signalised intersection shall comply with the Engineering Report prepared by VKL Consulting dated May 2010.

4.10 Condition B30 – Park Adjacent to Seaview Street

The amended Subdivision Plan at **Annexure B** provides for a "land connection 20m wide to the Champagne Drive road reserve". The connection will be dedicated as a public reserve, as will the Seaview Street Park shown on the approved Subdivision Plan. Amendment of Condition B30 is therefore requested as follows:

Amended Condition B30 – Park Adjacent to Seaview Street

The Seaview Street Park being proposed Lot 166 shown on the Plan of Proposed Subdivision, Reference 17900B, Rev C, dated 19 May 2010 shall be dedicated as a public reserve as part of Stage 3B.

The Landscape Plan for this park must reflect the drawing titled "Park Concept Section – for discussion purposes only" prepared by Conics, dated July 2008, Project No. 71887_SD_2.05.

4.11 Condition B34(2) – Asset Protection Zones

This condition requires asset protection zones in Stages 1B, 2B and 2A to be provided on private land. Tweed Shire Council has advised by letter dated 17 July 2009 (**Annexure G**) that Council supports an amendment to Approval No. MP06_0243 nominating Fraser Drive as an asset protection zone.

Accordingly, amendment of Condition B34(2) is requested as follows:

Amended Condition B34(2) – Asset Protection Zones

Fraser Drive will comprise the asset protection zone for all Stages fronting that road.

4.12 Condition E33 – Section 94 Monetary Contributions

Amendments to the amounts of the contributions is required to reflect the amended layout and staging.

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Casual Open Space

The approved proposed Subdivision Layout Plan provides for casual open space to be dedicated and embellished on site (see **Annexure B**). The proposed amended Plan of Proposed Subdivision at **Annexure C** essentially retains these areas of open space.

In summary based on the requirements of Tweed Development Control Plan 2008, Section A5 – Subdivision Manual, based on 158 dwellings @ 2.4ppd and 11.3m²pp, a total of approximately 4300m² of usable open space is required.

Proposed Lots 57, 165 and 166 having a total area of 11,214m² are intended to be dedicated and embellished as casual open space to satisfy the demand generated by the subdivision.

The plans at **Annexure J** indicate that within Lots 165 and 166 there is 3294m² of usable casual open space and the whole of proposed Lot 57 is usable thus providing a total usable area of 5511m². This is well in excess of the 4300m² required and therefore the current requirement to pay a contribution in addition to onsite dedication and embellishment is unreasonable and inconsistent with Section A5 – Subdivision Manual. Deletion of the casual open space contribution from Condition E33 is therefore required.

Master Drainage Contribution

The consent requires a contribution to be paid under the South Tweed Heads Master Drainage Contributions Plan for the whole site. However, the Master Drainage Plan only applies to part of the site. The plans at **Annexure K** show the actual catchment boundaries which is limited to Stages 2B and 3B. Therefore reference to all other stages should be deleted from the conditions and the area within Stages 2B and 3B should be amended.

Accordingly amendment of Condition E33 is required as follows:

Banora Point West/Tweed Heads South Open Space Contributions Plan (2006) – Structured			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	2504	22536
Stage 2A	32	2504	80128
Stage 3A	31	2504	77624
Stage 1B	20	2504	50080
Stage 2B	19	2504	47576
Stage 3B	34	2504	85136
South Tweed Heads Master Drainage Contributions Plan (2006)			
	No. of Ha	\$ per Ha	Sub-Total
Stage 2B	2.6166	13144	34392.59
Stage 3B	6.4418	13144	84671.01
Tweed Road Contribution Plan (2007)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	6084	54756
Stage 2A	32	6084	194688
Stage 3A	31	6084	188604
Stage 1B	20	6084	121680
Stage 2B	19	6084	115596
Stage 3B	34	6084	206856

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Street Planting in Residential Areas Contribution Plan (2005)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	297	2673
Stage 2A	32	297	9504
Stage 3A	31	297	9207
Stage 1B	20	297	5940
Stage 2B	19	297	5643
Stage 3B	34	297	10098
Tweed Shire Library Facilities Contribution Plan (2002)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	792	7128
Stage 2A	32	792	25344
Stage 3A	31	792	24552
Stage 1B	20	792	15840
Stage 2B	19	792	15048
Stage 3B	34	792	26928
Bus Shelters Contribution Plan (2005)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	60	540
Stage 2A	32	60	1920
Stage 3A	31	60	1860
Stage 1B	20	60	1200
Stage 2B	19	60	1140
Stage 3B	34	60	2040
Environ Cemetery Contribution Plan (2005)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	120	1080
Stage 2A	32	120	3840
Stage 3A	31	120	3720
Stage 1B	20	120	2400
Stage 2B	19	120	2280
Stage 3B	34	120	4080
Emergency Facilities (Surf Life Saving) Contribution Plan (2006)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	113	1017
Stage 2A	32	113	3616
Stage 3A	31	113	3503
Stage 1B	20	113	2260
Stage 2B	19	113	2147
Stage 3B	34	113	3842

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Council Admin Offices and Technical Support Facilities Contribution Plan (2007)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	1759.90	15839.10
Stage 2A	32	1759.90	56316.80
Stage 3A	31	1759.90	54556.90
Stage 1B	20	1759.90	35198.00
Stage 2B	19	1759.90	33438.10
Stage 3B	34	1759.90	59836.60
Cycleways Contribution Plan (2005)			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	447	4023
Stage 2A	32	447	14304
Stage 3A	31	447	13857
Stage 1B	20	447	8940
Stage 2B	19	447	8493
Stage 3B	34	447	15198
Shirewide/Open Space Contribution Plan (2006) - Casual			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	1031	9279
Stage 2A	32	1031	32992
Stage 3A	31	1031	31961
Stage 1B	20	1031	20620
Stage 2B	19	1031	19589
Stage 3B	34	1031	35054
Shirewide/Regional Open Space Contribution Plan (2006) - Structured			
	No. of ET	\$ per ED	Sub-Total
Stage 1A	9	3619	32571
Stage 2A	32	3619	115808
Stage 3A	31	3619	112189
Stage 1B	20	3619	72380
Stage 2B	19	3619	68761
Stage 3B	34	3619	123046
TOTAL CONTRIBUTIONS PAYABLE			
Stage 1A		151,442.10	
Stage 2A		538,460.80	
Stage 3A		520,633.90	
Stage 1B		336,538.00	
Stage 2B		354,103.69	
Stage 3B		656,785.61	
TOTAL		2,438,900.50	

NB: Amended Condition includes rates applicable at May 2010.

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4.13 Condition E34 – Section 64 Monetary Contributions

Amendments to the amounts of the contributions is required to reflect the amended layout and staging. Accordingly amendment of Condition E34 is required as follows:

1) Contributions plans relevant to the subdivision include:

- a) Development Services Plan No.4 - Tweed Heads Tweed Heads South Fingal Head East Banora Point
- b) Sewer Contributions - Banora Point

2) Prior to the endorsement of a Subdivision Certificate for each stage of the subdivision, the Proponent must pay, in proportion to the additional lots created by that stage, the following contributions to Council pursuant to Section 64 of the Local Government Act 1993.

NB: Water – 1ET per lot < 2000m²: 1.2 ET per lot > 2000m².

Stages	Water Development Servicing Plan No. 4		Sewer Banora	
	Calculation	Total	Calculation	Total
Stage 1A	9 ET @ \$10709	96381.00	9 ET @ \$5146	46314
Stage 2A	32 ET @ \$10709	342688.00	32 ET @ \$5146	164672
Stage 3A	31 ET @ \$10709	331979.00	31 ET @ \$5146	159526
Stage 1B	2 x 1 and 18 x 1.2 = 23.6 ET @ \$10709	252732.40	20 ET @ \$5146	102920
Stage 2B	15 x 1 and 4 x 1.2 = 19.8 ET @ \$10709	212038.20	19 ET @ \$5146	97774
Stage 3B	32 x 1 and 2 x 1.2 = 34.4 ET @ \$10709	368389.60	34 ET @ \$5146	174964
TOTALS		1,604,208.20		746,170

NB: Amended condition includes rates applicable at May 2010.

4.14 Schedule 3 – Statement of Commitments

Amendments to the Statement of Commitments are required to reflect the amended Subdivision Plan, amended Acoustic Report and to correct errors. The required changes are as follows:

Development Staging

Action

Development staging is to be generally in accordance with the amended Subdivision Layout Plan Reference No. 17900B, Rev B, 19 May 2010.

Acoustic Management

The lot numbers referred to in the actions required cannot be reconciled with the lot numbers on the current consent plan. The amended Acoustic Report identifies 19 lots which require acoustic treatment of future dwellings. Therefore the Action Statement should be amended as follows:

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Action

Registration of a Restriction on Use pursuant to Section 88B of the Conveyancing Act requiring future dwellings on Lots 22 – 30, 71 and 125 – 134 to be constructed in accordance with AS3671:1989 "Acoustics – Road Traffic Noise Intrusion – Building Siting and Construction" to achieve the maximum internal noise levels prescribed in AS/NZS2107:1987 "Acoustics – Recommended Design Sound Level and Reverberation Times for Building Interiors".

Future Dwellings

Reference to Lots 166, 167 and 168 in the Action section appears to be an error as the total number of lots in the original consent is only 161. The intention was that this action apply to Lots 91, 92 and 93 shown on the original consent plan.

The lot numbers should be amended to reflect the amended Layout Plan as follows:

Action

Future dwellings on Lots 91, 92 and 93 are limited to the area identified as the building envelope on the amended Subdivision Layout Plan, Reference No. 17900B, Rev B, dated 19 May 2010.

5.0 ENVIRONMENTAL ASSESSMENT

Modification of the consent as proposed is essentially administrative in nature and will address a number of conditions and current anomalies.

Therefore no additional impacts are likely to arise and indeed the modified project will enable the development to proceed on a viable basis.

In the circumstances, it is therefore submitted that the Environmental Assessment accompanying the original Major Project Application provides an adequate Environmental Assessment of the modified project.

6.0 CONCLUSION

Modification of the conditions and terms of the approval as proposed is authorised by Section 75W (1)(a) and (b) of the Environmental Planning and Assessment Act.

The proposed modifications do not give rise to any significant physical changes to the scale, nature or footprint of the approved project and therefore no impacts other than those addressed in the original Environmental Assessment are likely to arise.

The proposed modification of the approval is considered to be sustainable and in the public interest and therefore approval of the application is respectfully requested.

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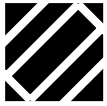
ANNEXURE A Completed Modification Application Form

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A.C.N. 093 157 165
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Modification of Major Project No. 06_0243
Project No: GRE 09/17 – May 2010

Fraser Drive
Tweed Heads South



**ANNEXURE B Project Approval No. 06_0243 and Approved Subdivision Plan Issued by the
Minister for Planning on 4 November 2008**

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Modification of Major Project No. 06_0243
Project No: GRE 09/17 – May 2010

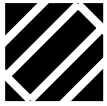
Fraser Drive
Tweed Heads South



ANNEXURE C **Amended Plans of Proposed Subdivision, Drawing No. 17900B-C, 19 May 2010, Drawing No. 16104B, Rev A, 26 February 2010 and Drawing No. 12512B, Rev B, 23 February 2010 – B & P Surveys**

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ANNEXURE D Environmental Noise Impact Report – CRG Pty Ltd, 17 February 2010

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Modification of Major Project No. 06_0243
Project No: GRE 09/17 – May 2010

Fraser Drive
Tweed Heads South



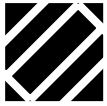
ANNEXURE E Fraser Drive Retail Analysis - Urbis, June 2009

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Project No: GRE 09/17 – May 2010

Fraser Drive
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**ANNEXURE F Email Dated 11 March 2009 from the Owner of Lot 17 DP 28390 Ocean Avenue,
Agreeing to Purchase the Adjoining Battleaxe Handle**

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ANNEXURE G Letter from Tweed Shire Council, Dated 17 July 2009

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Modification of Major Project No. 06_0243
Project No: GRE 09/17 – May 2010

Fraser Drive
Tweed Heads South



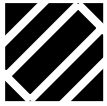
ANNEXURE H Engineering Report - VKL Consulting, May 2010

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Modification of Major Project No. 06_0243
Project No: GRE 09/17 – May 2010

Fraser Drive
Tweed Heads South



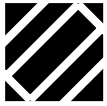
ANNEXURE I Vegetation Management Plan – Boyds Bay Environmental Services, 26 October 2009

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Modification of Major Project No. 06_0243
Project No: GRE 09/17 – May 2010

Fraser Drive
Tweed Heads South



**ANNEXURE J Plans Showing Usable Area of Casual Open Space, Drawing No. 18043D and
18038D – B & P Surveys, 28 January 2010**

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Modification of Major Project No. 06_0243
Project No: GRE 09/17 – May 2010

Fraser Drive
Tweed Heads South



ANNEXURE K **Plan of Stormwater Catchment Area Contributing to the Western Drainage Scheme
Catchment, Drawing No. 5536-SW-C1 – VKL Consulting;**

**Plan of Stormwater Catchment Areas, Drawing No. 18054D – B & P Surveys,
4 February 2010**

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ANNEXURE L Gilbert & Sutherland Revised Plans of Water Quality Treatment Ponds

GJ0878.3.6 - Wetland Layout, 12 March 2010

GJ0878.3.7 - Cross Sections of Wetland Area, 11 March 2010

GJ0978.3.8 - Typical Constructed Wetland Details, 15 December 2009

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