

Stage 1B	130	\$851	\$110,630
Stage 2B	169	\$851	\$143,819
Stage 3B	175.5	\$851	\$149,351
Street Planting in Residential Areas Contribution Plan (2005)			
	No. of Lots	\$ per allotment	Sub-Total
Stage 1A	11	\$297	\$3,267
Stage 2A	32	\$297	\$9,504
Stage 3A	33	\$297	\$9,801
Stage 1B	20	\$297	\$5,940
Stage 2B	26	\$297	\$7,722
Stage 3B	27	\$297	\$8,019
Tweed Shire Library Facilities Contribution Plan (2002)			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$688	\$7,568
Stage 2A	32	\$688	\$22,016
Stage 3A	33	\$688	\$22,704
Stage 1B	20	\$688	\$13,760
Stage 2B	26	\$688	\$17,888
Stage 3B	27	\$688	\$18,576
Bus Shelters Contribution Plan (2005)			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$26	\$286
Stage 2A	32	\$26	\$832
Stage 3A	33	\$26	\$858
Stage 1B	20	\$26	\$520
Stage 2B	26	\$26	\$676
Stage 3B	27	\$26	\$702
Environ Cemetery Contribution Plan (2005)			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$131	\$1,441
Stage 2A	32	\$131	\$4,192
Stage 3A	33	\$131	\$4,323
Stage 1B	20	\$131	\$2,620
Stage 2B	26	\$131	\$3,406
Stage 3B	27	\$131	\$3,537
Emergency Facilities (Surf Life Saving) Contribution Plan (2006)			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$200	\$2,200
Stage 2A	32	\$200	\$6,400
Stage 3A	33	\$200	\$6,600
Stage 1B	20	\$200	\$4,000
Stage 2B	26	\$200	\$5,200
Stage 3B	27	\$200	\$5,400
Council Admin offices and Technical Support Facilities Contribution Plan (2007)			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$1996.80	\$21,964.80
Stage 2A	32	\$1996.80	\$63,897.60
Stage 3A	33	\$1996.80	\$65,894.40
Stage 1B	20	\$1996.80	\$39,936
Stage 2B	26	\$1996.80	\$51,916.80
Stage 3B	27	\$1996.80	\$53,913.60
Cyclways Contribution Plan (2005)			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$352	\$3,872
Stage 2A	32	\$352	\$11,264

b) Sewer Contributions - Banora Point

Head East Banora Point

a) Development Services Plan No.4 - Tweed Heads Tweed Heads South Fingal

1) Contributions plans relevant to the subdivision include:

E34 Section 64 Monetary Contributions

A copy of the Section 94 contribution plans may be inspected at the Civic and Cultural Centres, Tumbulgum Road, Murwillumbah and Brett Street, Tweed Heads.

6) Section 94 Plans

Evidence of the payment to Council, shall be submitted to the Certifying Authority prior to the issue of the Subdivision Certificate for each stage of the project.

The contribution shall be paid in the form of cash or bank cheque, made out to Tweed Shire Council. For accounting purposes, the contribution may require separate payment for each of the categories above and you are advised to check with Council.

5) Timing and Method of Payment

Stage 3A	33	\$352	\$11,616
Stage 1B	20	\$352	\$7,040
Stage 2B	26	\$352	\$9,152
Stage 3B	27	\$352	\$9,504
Shirewide / Regional Open Space Contribution Plan (2006) – Casual			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$855	\$9,405
Stage 2A	32	\$855	\$27,360
Stage 3A	33	\$855	\$28,215
Stage 1B	20	\$855	\$17,100
Stage 2B	26	\$855	\$22,230
Stage 3B	27	\$855	\$23,085
Shirewide / Regional Open Space Contribution Plan (2006) – Structured			
	No. of ET	\$ per ET	Sub-Total
Stage 1A	11	\$2,327	\$25,597
Stage 2A	32	\$2,327	\$7,4464
Stage 3A	33	\$2,327	\$76,791
Stage 1B	20	\$2,327	\$46,540
Stage 2B	26	\$2,327	\$60,502
Stage 3B	27	\$2,327	\$62,829
TOTAL CONTRIBUTIONS PAYABLE			
Stage 1A		\$186,587.50	
Stage 2A		\$542,473.09	
Stage 3A		\$569,363.76	
Stage 1B		\$375,277.15	
Stage 2B		\$456,235.82	
Stage 3B		\$479,261.58	
TOTAL		\$2,609,198.70	

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.

STAGES	Water Development Servicing Plan No 4	Sewer Banora		
		Calculation	Total	Calculation
Stage 1A	11 ET @ \$9997	\$109,967	11 ET @ \$4804	\$52,844
Stage 2A	32 ET @ \$9997	\$319,904	32 ET @ \$4804	\$153,728
Stage 3A	33 ET @ \$9997	\$329,901	33 ET @ \$4804	\$158,532
Stage 1B	21.8 ET @ \$9997	\$217,935	20 ET @ \$4804	\$96,080
Stage 2B	26.6 ET @ \$9997	\$265,920	26 ET @ \$4804	\$124,904
Stage 3B	28 ET @ \$9997	\$279,916	27 ET @ \$4804	\$129,708
TOTALS		\$1,523,543		\$715,796

3) These charges to remain fixed for a period of twelve (12) months from the date of this approval and thereafter in accordance with the rates applicable in Council's adopted Fees and Charges current at the time of payment.

4) A copy of the Section 64 contribution plans may be inspected at the Civic and Cultural Centres, Tumbulgun Road, Murwillumbah and Brett Street, Tweed Heads.

ADVISORY NOTES

AN1 Compliance Certificate, Water Supply Authority Act, 2000

Prior to issuing a Subdivision Certificate, a Compliance Certificate shall be provided to the approval authority showing that the project has met with the detailed requirements of the relevant water supply authority for the region that the subject site is located within. The developer shall obtain the Compliance Certificate from the relevant local water supply authority and produce this to the satisfaction of:

- (1) the certifying authority before release of the Construction Certificate,
- (2) the approval authority before the release of the Subdivision Certificate, and
- (3) the principal certifying authority prior to occupation.

AN2 Requirements of Public Authorities for Connection to Services

The Proponent shall comply with the requirements of any public authorities (e.g. Energy Australia, Telstra Australia, AGL, etc) in regard to the connection to, relocation and/or adjustment of the services affected by the construction of the proposed structure. Any costs in the relocation, adjustment or support of services shall be the responsibility of the Proponent. Details of compliance with the requirements of any relevant public authorities are to be submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate.

AN3 Compliance with Building Code of Australia

The Proponent is advised to consult with the Certifying Authority about any modifications needed to comply with the BCA prior to submitting the application for a Construction Certificate.

AN4 Structural Capability for Existing Structures

The structural capabilities of any existing structure will need to meet the requirements of the BCA and may require engaging a structural engineer.

AN5 Use of Mobile Cranes

The Proponent shall obtain all necessary permits required for the use of mobile cranes on or surrounding the site, prior to the commencement of works. In particular, the following matters shall be complied with to the satisfaction of the PCA:

- (1) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on site tower cranes which warrant the on street use of mobile cranes, permits must be obtained from Council:
 - (a) at least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions, and
 - (b) at least 4 weeks prior to the works for full road closures and partial road closures which, in the opinion of Council, will create significant traffic disruptions.
- (2) The use of mobile cranes must comply with the approved hours of construction an shall not be delivered to the site prior to 7.30am without the prior approval of Council.

AN6 Stormwater drainage works or effluent systems

A Construction Certificate for works that involve any of the following:

- (1) water supply, sewerage and stormwater drainage work (including connection of a private stormwater drain to a public stormwater drain, installation of stormwater quality control devices or erosion and sediment control works); and,
- (2) management of waste.

as defined by Section 68 of the Local Government Act, 1993 will not be issued until prior separate approval to do so has been granted by Council under Section 68 of that Act. Applications for these works must be submitted on Council's standard Section 68 application form accompanied by the required attachments and the prescribed fees.

AN7 Temporary Structures

An approval under Section 68 of the Local Government Act 1993 must be obtained from the Council for the erection of the temporary structures. The application must be supported by a report detailing compliance with the provisions of the Building Code of Australia. Structural certification from an appropriately qualified practicing structural engineer must be submitted to the Council with the application under Section 68 of the Local Government Act 1993 to certify the structural adequacy of the design of the temporary structures.

AN8 Disability Discrimination Act

This application has been assessed in accordance with the *Environmental Planning and Assessment Act 1979*. No guarantee is given that the proposal complies with the *Disability Discrimination Act 1992*. The Proponent/owner is responsible to ensure compliance with this

and other anti-discrimination legislation. The *Disability Discrimination Act 1992* covers disabilities not catered for in the minimum standards called up in the Building Code of Australia which references AS 1428.1 - Design for Access and Mobility. AS1428 Parts 2, 3 & 4 provides the most comprehensive technical guidance under the *Disability Discrimination Act 1992* currently available in Australia.

AN9 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance (NES) matter; or Commonwealth land, without an approval from the Commonwealth Environment Minister.

This application has been assessed in accordance with the New South Wales Environmental Planning & Assessment Act, 1979. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation. It is the proponents responsibility to consult Environment Australia to determine the need or otherwise for Commonwealth approval and you should not construe this grant of approval as notification to you that the Commonwealth Act does not have application. The Commonwealth Act may have application and you should obtain advice about this matter. There are severe penalties for non-compliance with the Commonwealth legislation.

SCHEDULE 3

MP 06_0243

151 LOT RESIDENTIAL SUBDIVISION

FRASER DRIVE, SOUTH TWEED

STATEMENT OF COMMITMENTS

(SOURCE: PREFERRED PROJECT REPORT)



STATEMENT OF COMMITMENTS

FRASER DRIVE MP 06-0243

Action		Timing for Completion	Responsibility
PRE CONSTRUCTION			
Development Staging			
Objective	Minimise potential environmental impacts to on-site environmental values and surrounding residential amenity, during construction.		
Action	Development staging is to be generally in accordance with Proposed Plan No. 20934-5M prepared by Conics Pty Ltd.	Construction Project Manager	
Purpose	To ensure the application of environmental measures for each stage of the proposal.		
Vegetation Management			
Objective	Protect on-site conservation values and vegetation with habitat quality and to ensure conservation of endangered ecological communities.		
Action	A detailed Vegetation Management Plan including management of matters such as weeds, rehabilitation/revegetation, bushfire management and ongoing maintenance will be prepared to the satisfaction of the Department, in consultation with Council. Buffer areas to be maintained by the Proponent for a period of 5 years before being handed over to Council.	Prior to the issue of a Construction Certificate	Proponent
	Propagation and replanting of the rough-shelled bush nut within the proposed buffer areas and open space within the site.	Prior to the issue of a Construction Certificate	Proponent

Action		Timing for Responsibility	
		Certificate	
All buffer Zones and APZ marked on Plan No. 20934-5M prepared by Conics Pty Ltd, are to be pegged on site		Prior to the issue of a Construction Certificate	
Water Quality			
Objective			
Ensure that any runoff is treated to address desired water quality objectives as specified by Council:			
- Water discharged during operational phases is to have a maximum suspended solids concentration of 300kg/ha/yr, a maximum Total Nitrogen of 4.5Lg/ha/yr and a maximum Total Phosphorus of 0.8kg/ha/yr.			
Action		Prior to the issue of a Construction Certificate	PropONENT
Prepare a Sediment and Erosion Control Plan for endorsement by Council. The Sediment and Erosion Control Plan is to be based on Drawing No. 7214/29/01-DA10 of the supporting diagrams to the Engineering Report and the specifications of the Engineering Report as follows:		Prior to the issue of a Construction Certificate	PropONENT
-Conventional street drainage would be utilised to convey stormwater runoff from the upper reaches of the catchment area down to the stormwater treatment and detention devices to be constructed around the lower parts of the development site.		Prior to the issue of a Construction Certificate	PropONENT
-Treatment devices such as gross pollutant traps and wetlands would be incorporated into the open space areas (sized to meet Council's 'deemed to comply' criteria outlined in the Development Design Specification D7 - Stormwater Quality).		Prior to the issue of a Construction Certificate	PropONENT
Purpose			
To achieve ANZECC water quality criteria or any criteria set by Council.			

Action		Timing for Completion		Responsibility	
Public Areas					
Objective	Ensure nominated areas of public space are developed to a standard that will allow dedication to Council.				
Action	Develop roads in accordance with Council's criteria and satisfaction.	End of construction phase	Private Certifier		
	Construct to develop parks in accordance with Council's criteria and satisfaction.	End of construction phase	Private Certifier		
	Construct to develop stormwater treatment areas in accordance with Council's criteria and satisfaction.	End of construction phase	Private Certifier		
Purpose	To provide nominated areas of public space in accordance with Council's existing management measures.				
Access					
Objective	To provide safe and efficient access to the site for construction traffic and future residents.				
Action	Provide access via those points identified in 'Proposed Subdivision Plan', drawing no. 20934-5M prepared by Conics Pty Ltd and described as follows:				
	• Access A – will be the major all movement access located on Fraser Drive at the north-eastern corner of this site;	Prior to issue of Construction Certificate.	Proponent		
	• Access B – accesses Fraser Drive via a left in left out arrangement;	Prior to issue of	Proponent		

Action		
Timing for Completion		
	Construction Certificate.	
	Prior to issue of Construction Certificate.	• Access C – local street connection to Ocean Avenue;
Proponent		
Proponent	Prior to issue of Construction Certificate.	• Access D – local street connection to Hillcrest Avenue on the western periphery of the development;
Proponent	Prior to issue of Construction Certificate.	• Access E – local street connection as an extension to Merlot Drive at the southern end of the development.
Proponent	Prior to issue of Construction Certificate.	Upgrade of the current Fraser Drive/Pioneer Country Access intersection to a four-leg, signalized intersection. The intersection is to be activated as a working signalised intersection upon the release of stage 1A.
Proponent	Prior to issue of Construction Certificate.	To allow residents to access their properties and construction traffic to access the site without impacting on residential amenity.
Bush Fire Management		
Objective		To minimise the risk associated with the loss of property and human life from bush fire.
Action	Prior to Construction Certificate	Incorporate a 20 metre Asset Protection Zone from the outer edge of the marked SEPP 14 40 metre Buffer.
Dwellings on lots in the east and south-east of the site adjoining Fraser Drive will need to comply with Level 1	Prior to Occupation	

Action		Timing for Completion
Action	construction as outlined in AS3959-1999	Certificate
	Construct the elevation of the residential lots facing the SEP 14 Wetland/Tall Open Ecotonal Forest in accordance with Level 2 performance levels AS3959-1999.	Prior to Occupation Certificate
	The appropriate APZs shall be provided for each stage of the development.	Prior to Occupation Certificate
	The supply of water, electricity and gas shall be in accordance with Section 4.1.3 of <i>Planning for Bush Fire Protection 2006</i> .	Prior to Occupation Certificate
	Public Road Access shall comply with Section 4.1.3(1) of <i>Planning for Bush Fire Protection 2006</i> .	
	Property Access Roads shall comply with Section 4.1.3(2) of <i>Planning for Bush Fire Protection 2006</i> .	
	Note: Any further residential development application lodged for proposed lots within this subdivision, identified as bush fire prone land on the Councils Bush Fire Prone Land map, may be subject to Section 79BA of the EP & A Act and must meet the requirements of Planning for Bushfire Protection, 2006.	
	Electricity transmission lines in Stage 2B and 3B is to be provided underground for Lots 112-135.	Prior to Occupation Certificate
	Landslip and Hazards	
	Objective Determine the exact nature of the geotechnical aspects of the soil and groundwater interface and identify and lessen landslip risk.	Prior to
Action		PropONENT

Action	Timing for Completion		Proponent	Prior to Construction Certificate	Proponent	Prior to Construction Certificate	Proponent	Prior to Construction Certificate	Proponent
Excavate approximately thirty excavator test pits, one on each proposed allotment boundary where such boundaries intersect the current estimated or inferred location of the basalt/metamorphic contact zone as shown on Coffey Drawing 1 in report ref. B17439/1-B. The purpose of these test pits is to intersect the basalt/metamorphic contact zone to gain further information on the location and geometry of contact zone and to retrieve representative disturbed samples and undisturbed U50 tube samples of the various soil types present for laboratory testing.			Prior to Construction Certificate			Prior to Construction Certificate			
Make observations of any groundwater seepage encountered in the test pits.			Prior to Construction Certificate			Prior to Construction Certificate			
Provide a full time experienced Geotechnical Engineer or Engineering Geologist at the testing who would be responsible for locating the test pits, nominating and directing sampling and field testing, retrieving representative samples of soil for laboratory testing and providing field logs of the subsurface conditions encountered. During logging, the strength of the clay soils would be measured with a pocket penetrometer or vane shear instrument. All test pit locations would be pegged and surveyed for location and reduced level.			Prior to Construction Certificate			Prior to Construction Certificate			
Continually review the results of the test pitting to assess if additional test pits are required to investigate and/or clarify particular areas of the site or aspects of the subsurface conditions.			Prior to Construction Certificate			Prior to Construction Certificate			
Commence the test pitting program near one of the Coffey test pit locations (e.g. test pits TPC5, TPC20) which clearly intersected the contact zone and move outwards from there, to improve the likelihood of intersecting the contact zone at a relatively shallow depth which will allow personnel to enter the pit to view and measure the orientation, thickness and nature of the soil in the contact and to retrieve disturbed samples and undisturbed U50 tube samples.			Prior to Construction Certificate			Prior to Construction Certificate			

Action		Timing for Responsibility	
Proponent	Excavate approximately fifteen excavator test pits at selected locations to infill the areas between existing Coffey test pits (which were mostly located on lines or "fences" in rows on from the upper to lower areas of the slope) and other areas of interest which may arise.	Prior to Construction	Proponent
	Carry out subsurface geotechnical investigations (test pits or boreholes) for engineering structures to be constructed on the site, including retaining walls, cuttings and buried services.	Prior to Construction	Proponent
	Undertake a program of laboratory testing to assess the geotechnical properties for the various soil types present. These would include but not necessarily be limited to the following: - o Atterberg limits. - o Natural moisture content. - o Unit weight. - o Undrained shear strength. - o Peak and residual effective stress shear strength parameters.	Prior to Construction	Proponent
	Measure the peak and residual effective stress parameters using consolidated, undrained triaxial tests with pore pressure measurements (for peak values) and direct shear tests (for peak and residual values). All laboratory testing would be carried out by a NATA-registered geotechnical laboratory.	Prior to Construction	Proponent
	Carry out slope stability analyses when the results of the field and laboratory investigations have been finalised, utilizing the results of subsurface investigations, groundwater observations, laboratory test results, final ground surface profile and structural loadings appropriate for each allotment. Each analysis would reflect the current knowledge of the local subsurface conditions and include any variability in such conditions and the geometry of individual layers. Any variability in surface profile would also be assessed.	Prior to Construction	Proponent
	Carry out the slope stability analyses using limit equilibrium methods. The slope stability analyses should	Prior to Construction	Proponent

Action		Timing for Completion		Responsibility	
confirm the stability of the slopes under "normal" and adverse conditions for a factor of safety of not less than 1.5. The analyses would include sensitivity studies of variability in soils strength parameters and groundwater (phreatic) conditions. Assess the effects of any modifications made to slope profiles and installation of subsurface drains on slope stability. Compile the results of the geotechnical investigations in a formal report presenting discussion of the methodologies used, the results of field investigations and laboratory testing and the results, conclusions and recommendations reached as a result of the geotechnical engineering interpretations and analyses of the investigations. Limit development on areas identified as having landslip risk to a defined building envelope on the larger residential lots.	Provide the Director of Engineering Tweed Shire Council detailed engineering plans, including the results and recommendations of any subsequent geotechnical testing for works proposed on the pre-filled flat section of Lot 9 in DP 1039569 dated 7.03.07 prepared by B & P Surveys Consulting Surveyors, but not including the ecological buffer area nominated in the vicinity of the Integrated Housing Lot.	Purpose To provide detailed measures for revegetation structures as per the recommendations of the geotechnical report prepared by Shaw:urquhart, dated 12 January 2007 and letter dated 8 March 2007.	Acid Sulphate Soils	Certificate	Proponent

Action		Timing for Completion		Responsibility	
Objective	To minimise potential impacts from acid sulphate soils.				
	Action	Prepare an Acid Sulphate Soils Management Plan for endorsement by Council.	Prior to Construction	Certificate	Proponent
		Test all soils excavated from below the current surface level for the presence of AASS and PASS during excavation.	Prior to Construction	Certificate	Proponent
		Treat all AASS and PASS material in accordance with the ASSMAC guidelines.	Prior to Construction	Certificate	Proponent
		Ensure that any surface water discharged off site is acceptable under the ANZECC (2000) water quality criteria prior to release from the site.	Prior to Construction	Certificate	Proponent
		Ensure that on-site activities do not impact upon groundwater quality, levels or movement outside of conditions experienced during drought or flood.	Prior to Construction	Certificate	Proponent
		Ensure that appropriate and adequate erosion and sediment control measures are installed and maintained for the duration of the construction works.	Prior to Construction	Certificate	Proponent
	Purpose	Implementation of the commitments of the Acid Sulphate Soils Management Plan prepared by Gilbert and Sutherland dated September 2007 to ensure the implementation of best practice environmental management.			
	Landscaping				
	Objective	To prevent the potential visual impacts of revegetation walls.			

Action		Timing for Completion		Responsibility	
Action	All Landscaping is to be in accordance with the Statement of Landscaping Intent prepared by Vivo.	Prior to Construction	Certificate	Proponent	
	Purpose To ensure that proposed landscaping is consistent with Council's guidelines and the management of potential visual impacts from the construction of revetment walls and removal of on site vegetation.				
	Objective Provide for the safe evacuation of future residents in the event of flood.				
	Action Prepare a Flood Evacuation Plan to be endorsed by Council.	Prior to Construction	Certificate	Proponent	
Flooding					
	Objective Provide for the safe evacuation of future residents in the event of flood.				
	Action A flood evacuation pathway that extends from Fraser Drive development to Fraser Drive and enters into the Fraser Drive Park. Evacuation and service crews would be able to access the higher areas of the site.	Prior to Construction	Certificate	Proponent	
	Purpose To ensure a system is in place for the evacuation of residents in the event of flood.				
Stormwater					
Stormwater treatment for the Stage 2 - Integrated Housing Lot will be designed in accordance with Council's Subdivision Design Manual and Stormwater Quality Specifications.		Prior to Stage 2 - Integrated Housing Lot Construction	Certificate	Proponent	
Acoustic Management					

Action		Timing for Completion	Responsibility
Objective	To provide residential development in noise-sensitive areas.		
Action	Preparation of a building covenant requiring the Lots 1, 14 – 25, 51, 95, 103 -106, 112 - 113, and 125 – 135 to be constructed using Construction Category 2, as defined by AS 3167, and air conditioning to be installed at dwellings on these lots.	Prior to Subdivision certificate	Proponent
Purpose	To buffer living areas adjacent to Fraser Drive from traffic noise.		
CONSTRUCTION			
Conservation and Vegetation Management			
Objective	To protect on-site conservation values, vegetation with habitat quality and to ensure conservation of endangered ecological communities.		
Action	Provide appropriate development setbacks in accordance with the buffers identified in Plan No. 20934-5M prepared by Conics Pty Ltd.	Prior to Construction Certificate.	Proponent
	Implement an appropriate weed management program to target existing infestations of environmental weeds which currently threaten these communities. (On-going).	Prior to Construction Certificate.	Proponent
	Clearly delineate and physically mark out areas of conservation value to be retained in accordance with the buffers identified in Plan No. 20934-5M prepared by Conics Pty Ltd.	Prior to Construction Certificate.	Proponent
	Ensure construction vehicles do not impact on the integrity of conserved vegetation.	Prior to Construction Certificate.	Proponent
Purpose			

Action		Timing for Completion	Responsibility
To maintain the integrity of endangered ecological communities.			
Residential Amenity			
Objective			
Protect residential amenity during construction.			
Action			
Prepare a Construction Management Plan for both site preparation works and construction works in accordance with Council's requirements for endorsement by Council. The Plan would include the construction of roads, public facilities, park and open space and stormwater management treatment measures. It would include measures relating to the hours of work, site access and egress, noise attenuation on heavy vehicles and machines, location of waste receptacles, management and disposal of construction waste, notification of adjacent landholders and management of acid sulphate soils.		Prior to issue of Subdivision certificate.	Proponent
Purpose			
To formulate a Plan to reduce the potential impacts of construction on the amenity of surrounding properties.			
Land Slip and Hazards			
Objective			
Prevent land slip through the construction phase.			
Action			
Undertake earth works and construct revetment walls in accordance with the technical details of the geotechnical report.		Prior to issue of construction certificate.	Proponent
Provide all geotechnical services through the one company to ensure continuity.		Prior to issue of construction certificate.	Proponent
Provide on-site geotechnical presence during the construction phase to advise on the following activities:		Prior to issue of	Proponent

Action		Timing for Completion	Responsibility
		construction certificate.	
• Level 1 earthworks testing of all fill during site preparation and the placing and compaction of soil.	Prior to issue of construction certificate.	Proponent	
• Excavation of footings for retaining walls and other structures to conform the conditions and design parameters as expected from the geotechnical investigations.	Prior to issue of construction certificate.	Proponent	
• Bulk excavations to map the location, orientation and geometry of the basalt/metamorphic contact zone and to retrieve representative samples of the materials within the contact zone for laboratory tests as required and identifying any further areas of groundwater seepage which can then be treated if required.	Prior to issue of construction certificate.	Proponent	
Purpose Undertake earth works in accordance with the geotechnical report and provide on-site geotechnical presence to provide advice and identify any further problems.			
Groundwater			
Objective To protect the SEPP14 wetland from possible contamination by the surrounding areas groundwater during excavation			
Action Prepare a Groundwater Management Plan to incorporate details on the areas to be dewatered within the subdivision	Prior to Construction Certificate		
Purpose To formulate a plan to prevent groundwater running into the SEPP14 wetland			

Action		Timing for Completion		Responsibility	
Cultural Heritage					
Objective Protect on-site items and objects of archaeological and cultural value to the Traditional Owners and ensure management of any impacts are managed in accordance with the relevant statutory requirements.					
Action A semi-permanent fence be built 10 metres from the known boundary of the midden site in order to protect the site from any inadvertent harm by workers developing the Subject Lands. The fence should be built under the supervision of a qualified archaeologist and a representative of the Traditional Owners. The location of the midden should be inserted in all future drawing, maps and engineering plans connected with development of the sub-division.		Prior to issue of subdivision certificate.	Proponent		
It is recommended that following the implementation of the above, a CHMP be drafted and provided to Council to support any future applications under Section 87 of the <i>National Parks and Wildlife Act 1974 (NSW)</i> . The finalisation of the CHMP will follow Council's negotiations with the Traditional Owners and relevant Indigenous representatives in undertaking the planned widening of Fraser Drive.		Prior to issue of subdivision certificate.	Proponent		
It is recommended that employees and contractors conducting earthworks on Lot 135 of the proposed Subdivision Plan be instructed that they are working close to a midden in a culturally sensitive area. It is possible that their works may unearth cultural material. Employees and contractors should be instructed that caution should be exercised when working on the site. They should be instructed on how to identify this cultural material and that in the event that they do find any they are to stop work immediately and follow Recommendation 5 of this report.		Prior to the construction certificate	Proponent		
It is recommended that contractors engaged in earthworks or subsurface disturbance on the Subject Lands, be advised that under the terms of the National Parks and Wildlife Act 1974 (NSW) it is an offence for any person to knowingly disturb, destroy, deface or		Prior to the construction certificate	Proponent		

Action		Timing for Completion
Action	damage or permit the destruction, defacement or damage to an Aboriginal object or Aboriginal place without first obtaining the written consent of the Director General of the Department of Environment and Climate Change.	
	It is recommended that in the event that future works at the proposed residential subdivision disturb Aboriginal cultural materials, works at or adjacent to the material must stop immediately. Temporary Fencing must be erected around the site and the material must be identified by an independent and appropriately qualified archaeological consultant. The Regional Archaeologist of the Cultural Heritage Unit of the Department of Environment and Conservation, Coffs Harbour, the Tweed Byron L.A.L.C. and the Ngunduwai/Minjungbal descendants must be informed. They will advise as to the most appropriate course of action to follow. Works must not resume at the location without the prior written consent of the DECC, Tweed Byron L.A.L.C. and the Ngunduwai/Minjungbal descendants.	
	It is recommended that due to the sensitivity of the ridge line containing the closed Champagne Drive road reserve any initial subsurface disturbance be monitored by representatives of the Traditional Owners to ensure that cultural material is identified and protected. This monitoring will be independent of the Cultural Heritage Management Plan adopted to protect the midden site. If cultural material is identified, then Recommendation 5 will come into effect.	Prior to the construction certificate
	Purpose To protect, conserve and manage the potential impacts to archaeological and cultural heritage values in accordance with the requirements of the relevant statute.	
	Water Quality and Sediment Control	
Objective	Ensure that runoff is treated to achieve water quality parameters specified by Council for construction phases to ensure water quality and to minimise dust emission.	Prior to
Action		Proponent

Action	Timing for Completion	Responsibility	Adhere to the measures of a Council endorsed Erosion and Sediment Control Plan.		Issue of construction certificate.	Prior to issue of construction certificate.	Water Quality		During Construction Phase	Proponent	Direct all contaminated surface runoff to a treatment device to prevent sediment transport from the site. As a minimum, the Contractor shall provide the temporary erosion control measures as detailed on Cardno Figure No DA10, to prevent soil erosion, scouring, sediment transport and deposition. Temporary control measures may include: temporary sedimentation basins; temporary sediment filter fences; controls on amount of open ground; stabilisation of stockpiles; catch drains/perimeter bunds; and check dams.	During Construction Phase	Proponent	Install whatever other measures are considered necessary to minimise the impact of construction activities on the surrounding environment.		During Construction Phase	Proponent	Locate any stockpiles of topsoil and/or fill as far away as possible from dwellings and other buildings near the site and will have perimeter sediment filter fencing installed.		During Construction Phase	Proponent	Store any chemicals (including lime) or fuel/oil stored on site under cover in a bounded area or placed sufficiently above ground level to preclude contamination of surface water.		Post Construction	Proponent	Provide permanent stormwater treatment measures as soon as possible after the completion of each construction area.	

Action		Timing for Completion	Responsibility
Operate and maintain all sediment control structures in an effective operational condition. These structures must not be allowed to accumulate sediment volumes in excess of 70% sediment storage design capacity. Where sediment basins are used a marker shall be placed within the basin to show the level above which the design capacity occurs. Materials removed from sediment retention devices must be disposed of in a manner approved by Council that does not cause pollution.		Post Construction	Proponent
Undertake monitoring of any temporary sediment basins. Non complying test results would be notified to the developer. A site inspection would be undertaken by the developer at least each week, immediately before site closure and immediately following rainfall events that cause runoff.		Post Construction	Proponent
Undertake self audits systematically on site, recording:		On-going	Proponent
-Installation/removal of any erosion and sediment control device			
-The condition of each device employed (particularly outlet devices), noting whether it is likely to continue in an effective condition until the next self audit			
-Circumstances contributing to damage of any devices, accidental or otherwise			
-Storage capacity available in pollution control structures			
-Time, date, volume and type of any additional flocculants			
-The volumes of sediment removed from sediment retention systems, where applicable, and the site where sediment is disposed			

Action	Timing for Completion		Responsibility
-Maintenance or repair requirements (if any) for each device			
-Circumstances contributing to the damage to device			
-Repairs effected on erosion and pollution control devices			
Keep signed, completed self audits, original test results, weekly and other result sheets on site and ensure they are available on request to Council officers and other relevant statutory authorities. All records would be maintained in a form suitable for Council submission.			
Corrective Action:			
Deal with non compliance with the Erosion and Sediment Control Plan immediately.			
If possible, stop discharge and store runoff on site if the pH is below 6.5. A lime dose would be applied to restore to an acceptable pH before further discharge. The contractor would notify Council's Environmental and Health Services Unit of non compliance within 24 hours.			
If possible, stop discharge and store runoff on site if the pH is above 8.5. Dilution with other water until the pH was in the acceptable range would need to occur before further discharge.			
I Accept non-compliance if suspended solids are greater than 50mg / L and it is due to a storm event greater than the design of storm control devices. If not, stop and store discharge. Use flocculation agents to lower NFR, or Pump contaminated water over grassed filter strips or buffer areas to lower NFR. Repair or redesign/replace erosion and sediment control devices if non compliance is due to damage or ineffectiveness to ensure future compliance.			

Action		Timing for Completion	
Dust Control			
Minimise the preclearing of land. No vegetation clearing or stripping will occur in situations of high wind.		During Construction Phase	Proponent
Revegetate all permanent bunds and reshaped areas as quickly as possible.		During Construction Phase	Proponent
Minimise stockpiling on site where possible.		During Construction Phase	Proponent
Make available an onsite water cart at all times.			
Undertake visual monitoring throughout the construction phase. The Contractor will ensure any dust production is kept to a minimum and that action is taken on any complaints received.		During Construction Phase	Proponent
Maintain a daily record of site conditions and the dust management measures implemented. Complaints by residents are to be recorded in a complaints register.		During Construction Phase	Proponent
Implement the following measures depending on the source of any dust : application of water sprays to vegetation; dampening of exposed areas; the covering of all loaded trucks; an increase in the number of water trucks in operation; cessation of operations during periods of string winds.		During Construction Phase	Proponent
Purpose To ensure that any runoff or surface water shall only be discharged from the site once it has been treated to achieve ANZECC water quality parameters; to comply with the Environmental Planning and Assessment Act, Tweed Shire Council's Tweed Urban Stormwater Quality Management Plan and Development Design			

Action	Timing for Completion	Responsibility	POST CONSTRUCTION		
			Infrastructure and Public Transport	Objective	Action
				Specification D7 - Stormwater Quality, and with the approved Acid Sulphate Soils Management Plan; and to control the movement of dust offsite from the site works.	
				Provide water, sewerage, electricity and telephone infrastructure to the future residents at the site.	
		Prior to issue of subdivision certificate.	Proponent	Ensure the connection of all constructed developable lots to existing and available services. A statement would be provided to the private certifier indicated that all lots are adequately serviced.	
				To ensure future residential development is adequately serviced by urban services and infrastructure.	
				Conservation and Vegetation Management	
				Objective	
				To protect on-site conservation values, vegetation with habitat quality and to ensure conservation of endangered ecological communities post construction.	
		Prior to Subdivision Certificate	Proponent	Action	
				Implement appropriate weed management programs to target existing infestations of environmental weeds which currently threaten these communities.	
				Purpose	
				Continuation of weed management programs to control weed infestation.	
				Public Transport	
				Objective	
				Provide access to public transport facilities for the future residents at the site.	

Action		Timing for Completion	Responsibility
Action The applicant is to construct a bus stop on Fraser Drive as recommended by the Traffic Assessment.		Prior to issue of subdivision certificate.	Proponent
Purpose Ensure future residents are able to be serviced by existing public transport facilities.			
Future Dwellings			
Objective Ensure future dwellings are not impacted by aircraft noise.			
Action All new dwellings should be constructed in accordance with the relevant Australian Standard AS 2021 - 1 994 (Acoustics - Aircraft Noise Intrusion - Building Siting and Construction) to ensure that noise does not impact on the amenity of future residents.		Prior to Occupation Certificate	
Purpose Construction guideline for future dwellings.			
Objective Ensure development does not occur on areas not suitable for residential development			
Action Future dwellings on Lots 166, 167 and 168 are limited to area identified as the building envelop.			
Stormwater Management			
Objective To avoid detrimental impact on the water quality and aquatic environment, as a result of the discharge of contaminated stormwater runoff. To Comply with the Environment Planning and Assessment Act and with Tweed Shire Council's <i>Tweed Urban Stormwater Quality Management Plan</i> pollutant load objectives and Development Design Specification <i>D7-Stormwater Quality</i>			

Action	Timing for Completion Responsibility
Action All stormwater treatment devices should be sized to treat the 1 in 3 month rainfall event as required by Tweed Shire Council and proposed stormwater treatment trains for the site are to be delivered, monitored, maintained and reported as recommended in Cardno's Stormwater Management Plan dated 8th December 2006	As per timeline details in Cardno's Stormwater Management Plan