STATEMENT OF COM	STATEMENT OF COMMITMENTS								
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)	Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting				
Erosion and Sediment Control (Construction Phase)	Minimise the escape of wind-borne particles by complying with the Erosion and Sedimentation Control Plan	1.1.1 Minimise disturbance area 1.1.2 Promptly rehabilitate disturbed areas 1.1.3 Regularly water disturbed areas of the site	To ensure that air pollution does not exceed DECC standards	Ongoing during the construction phase for each relevant stage of the subdivision.	Any complaints to be recorded in the Complaints Register and valid claims to be acted on within one hour. Details to be provided in the quarterly Compliance Report. Responsibility: Project Manager or his/her Nominee (PM or N).				
	1.2 Minimise mobilisation of sediments by complying with the Erosion and Sedimentation Control Plan	1.2.1 Erect sedimentation fences, inlet filters, hay bale barriers and diversion drains in accordance with the Erosion and Sedimentation Control Plan. 1.2.2 The controls shall be maintained during the construction phase and defects liability period. 1.2.3 Comply with the provisions of the Stormwater Assessment and Management Plan, Gilbert and Sutherland, April 2013 (Annexure 8).	To ensure that water quality in receiving waters is not decreased in quality by sediment and nutrient loads	All sediment and erosion control measures to be in place prior to commencing site work or demolition for each relevant stage of the subdivision.	Visual monitoring shall be carried out on a weekly basis and after each storm event. Details to be contained in the quarterly Compliance Report. Responsibility: PM or N.				
2. Site Safety	2.1 Minimise risk of injury to construction workers and members of the public by generally complying with the Safety Management Plan	2.1.1 The principal contractor shall prepare a Health and Safety Plan and submit the Plan to the Project Manager for approval. The contractor shall comply with the approved Plan.	To ensure that Occupational Health and Safety Act 2000, Occupation Health and Safety Regulation 2001 and relevant Codes of Practice are complied with.	Prior to commencing any work on the site for each relevant stage of the subdivision.	Monitoring and reporting incidents to be recorded in the Incident Register and details to be included in the quarterly Compliance Report. Work Cover to be notified in appropriate circumstances. Responsibility: PM or N.				
		2.1.2 The principal contractor shall prepare a Traffic and Pedestrian Plan for approval by the Project Manager.	To ensure that traffic and pedestrian management during the construction phase complies with the RTA Traffic Control Worksite Manual and AS1742.3	Prior to commencing work on site for each relevant stage of the subdivision.	As above.				

April 2013 (Revised October 2013)
Page 1 of 10

STATEMENT OF COM/	STATEMENT OF COMMITMENTS									
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)	Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting					
3. Acid Sulphate Soil	3.1 Minimise disturbance of acid sulphate soils by limiting excavations in accordance with Acid Sulphate Soils management principles.	3.1.1 Comply with the provisions of the Acid Sulphate Soils Manual (ASSMAC, 1998) and Acid Sulphate Soil Management Plan at Annexure 18 .	To ensure that significant volumes of acid sulphate soils are not disturbed.	During the excavation phase for each relevant stage of the subdivision.	Monitor excavation and address compliance in the quarterly Compliance Report. Responsibility: PM or N.					
4. Construction of Subdivision	4.1 Minimise noise, dust, vibration and amenity impacts by generally complying with the Construction Management Plan and the Safety Management Plan to be prepared prior to construction commencing.	4.1.1 Limit work hours to 7.00am to 6.00pm Monday to Saturday. 4.1.2 Limit noise levels to 5dBA above background at the nearest residential receivers. 4.1.3 Prepare a Site Management Plan.	To mitigate adverse construction impacts.	Site Management Plan to be prepared and approved by the PCA prior to construction commencing for each relevant stage of the subdivision.	Address compliance in quarterly Compliance Report. Responsibility: PM or N.					
5. Landscaping and Embellishment	5.1 Achieve improved aesthetics and useability of the site.	5.1.1 Carry out the embellishment and landscaping works in general accordance with Landscape Master Plan (Annexure 5).	To soften the appearance of the building and hardstand areas and provide a more attractive pedestrian environment and car parking area.	Prior to the issue of a final Subdivision Certificate for each relevant stage of the subdivision.	Address compliance in quarterly Compliance Report. Responsibility: PM or N.					
	5.2 Soften the visual impact of the future buildings and surrounding hardstand areas	5.2.1 Carry out site landscaping in accordance with the Landscape Master Plan (Annexure 5).	As above.	Prior to the issue of a Subdivision Certificate for each relevant stage of the subdivision.	As above.					
6. Land Forming	6.1 Limit major landform changes to those shown on Annexure 11 subject to detailed engineering design to accompany the Construction Certificate.	6.1.1 Minimise landform changes to achieve desirable road gradients.	To minimise visual impacts on the landscape and changes in hydrology and comply with Tweed Shire Council Landforming Policy.	Ongoing during the construction phase for each relevant stage of the subdivision.	Certification to be provided by the Consulting Engineer prior to the issue of the Subdivision Certificate. Responsibility: Consulting Engineer.					
7. Threatened Species Protection	7.1 Protect all threatened species of flora as identified in the James Warren and Associates Report (Annexure 9).	7.1.1 Comply with the Vegetation Management and Rehabilitation Plan at Annexure 10 .	To ensure compliance of the Threatened Species Conservation Act, 1995 and mitigate potential adverse impacts.	Prior to the issue of a Subdivision Certificate for each relevant stage for each relevant stage of the subdivision.	Monitoring and reporting incidents to be recorded in the Incident Register and details to be included in the quarterly Compliance Report. Responsibility: PM or N.					

April 2013 (Revised October 2013)

STATEMENT OF COM/	STATEMENT OF COMMITMENTS									
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)	Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting					
8. Aboriginal Cultural Heritage	8.1 Avoid disturbing any areas of Aboriginal Cultural Heritage.	contained in the Cultural Na	To ensure compliance with the National Parks and Wildlife Act 1974.	Ongoing during the construction phase for each relevant stage of the subdivision.	Monitoring and reporting incidents to be recorded in the Incident Register and details to be included in the quarterly Compliance Report.					
		8.1.2 Comply with the conditions recommended by DECCW.			Responsibility: PM or N.					

Everick Conditions

- 8.1.3 The Proponent shall continue to consult with and involve all registered local Aboriginal representatives for the project, in the ongoing management of the Aboriginal cultural heritage values. Evidence of this consultation must be collated and kept on record. If the Proponent is planning to undertake ground disturbance within the areas Zoned 7(a) Environmental Protection (Wetlands and Literal Rainforest) (Figure 2), consultation with the registered Aboriginal Stakeholders should be undertaken.
- 8.1.4 If human remains are located at any stage during construction works within the Subject Lands, all works must halt in the immediate area to prevent any further impacts to the remains. The Site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Tweed Byron LALC, and the DECCW (Enviroline Ph: 131 555), are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the DECCW should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations. In all dealings with Aboriginal human remains, the proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.
- 8.1.5 If it is suspected that Aboriainal material has been uncovered as a result of development activities within the Subject Lands:
 - (a) work in the surrounding area is to stop immediately:
 - (b) a temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site;
 - (c) an appropriately qualified archaeological consultant is to be engaged to identify the material; and
 - (d) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the DECCW guidelines: Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010).
- 8.1.6 If Aboriginal cultural material is uncovered as a result of development activities within the Subject Lands, it is to be registered as a Site in the Aboriginal Heritage Information Management System (AHIMS) managed by the DECCW. Any management outcomes for the site will be included in the information provided to the AHIMS.
- 8.1.7 All effort must be taken to avoid any impacts on Aboriginal cultural heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent and the Aboriginal community.
- 8.1.8 An Aboriginal Cultural Education Program must be developed for the induction of all personnel and contractors involved in the construction activities on site. Records should be maintained of which staff/contractors were inducted and when for the duration of the project. The program should be developed and implemented in collaboration with the local Aboriginal community.

DECCW Conditions

- 8.1.9 The applicant must continue to consult with and involve all the registered local Aboriginal representatives for the project, in the ongoing management of the Aboriginal cultural heritage values. Evidence of this consultation must be collated and provided to the consent authority upon request.
- 8.1.10 In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the object(s). The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) (managed by DECCW) and the management outcome for the site included in the information provided to the AHIMS. The proponent will consult with the Aboriginal community representatives the archaeologist and DECCW to develop and implement management strategies for all objects/sites.
- 8.1.11 If human remains are located in the event that surface disturbance occurs, all works must halt in the immediate area to prevent any further impacts to the remains. The NSW Police are contacted immediately. No action is to be undertaken until police provide written notification to the proponent. If the skeletal remains are identified as Aboriginal, the proponent must contact DECCW's Enviroline on 131555 and representatives of the local Aboriginal community. No works are to continue until DECCW provide written notification to the proponent.

April 2013 (Revised October 2013)
Page 3 of 10

STATEMENT OF COM/	TATEMENT OF COMMITMENTS								
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)	Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting				
to be negotic DECCW AHIM 8.1.13 An Aboriginal	ated with the local Aboriginal cor AS unit within three (3) months of Cultural Education Program mus	void impacts to Aboriginal cultural heritommunity and DECCW. All sites impacted completion of these works. It be developed for the induction of all penen for the duration of the project. The pro	must have a DECCW Aborigina rsonnel and contractors involved	I Site Impact Recording (ASIR) for I in the construction activities on si	rm completed and submitted to te. Records are to be kept of				
9. Maintaining Asset Protection Zones	9.1 Achieve adequate asset protection zones.	9.1.1 Compliance with the Bushfire Assessment Report at Annexure 14.	To ensure compliance with the Rural Fires Act and Regulations and Planning for Bushfire Protection, 2006.	Ongoing during the operational phase for each relevant stage of the subdivision.	Following registration of the Plan of Subdivision, Tweed Shire Council and the Rural Fire Service.				
10. Adjacent Land Uses	10.1 To minimise conflicts between the proposed urban development and adjacent non-urban uses.	 10.1.1 Limit construction times to 7.00am to 6.00pm Monday to Saturday. 10.1.2 Implement sedimentation and erosion control during the construction phase in accordance with the Erosion and Sedimentation Control Plan. 	To minimise conflicts and adverse impacts between potentially incompatible land uses.	Ongoing during construction for each relevant stage of the subdivision.	Monitoring and reporting incidents to be recorded in the Incident Register and details to be included in the quarterly Compliance Report. Responsibility: PM or N.				
		10.1.3 A stock and dog-resistant fence shall be constructed at the back boundary of the allotment adjoining the western boundary of the site.							
11. Plan of Proposed Subdivision	11.1 The project to be carried out under the Community Land Development Act, 1989 and generally in accordance with the Plan Ref 18779B, B & P Surveys, 22.01.13.	11.1.1 Plans of Subdivision to be lodged for registration shall be generally in accordance with the Plan of Proposed Subdivision.	To ensure that the lots comply with the proposal plan.	In conjunction with registration of the Plan of Subdivisions in the Land Titles Office for each relevant stage of the subdivision.	Responsibility: PM or N.				
12. Traffic and Transport	12.1 Ensure that sufficient physical and environmental capacity exists in the local road network.	12.1.1 Construction of a temporary intersection with Fraser Drive with such intersection to be removed within three months of completion of permanent connection to Broadwater Parkway on the northern side of the site.	To ensure that appropriate accessibility and connectivity is provided.	Prior to release of the final Plan of Subdivision for each relevant stage of the subdivision.	Monitoring and reporting incidents to be recorded in the Incident Register and details to be included in the quarterly Compliance Report. Responsibility: PM or N.				

April 2013 (Revised October 2013)
Page 4 of 10

STATEMENT OF COM	STATEMENT OF COMMITMENTS								
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)	Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting				
13.Transport Access Guide	13.1 Ensure that future residents are adequately advised of travel options.	13.1.1 A transport access guide for residents of Altitude Aspire shall be provided to all new residents as part of the contract for sale advising them of travel options to and from particular venues by way of walking, cycling and public transport.	To minimise motor vehicle use.	Prior to sale of individual allotments.	Responsibility: PM or N.				
14. Water Supply	14.1 Ensure that an adequate potable water supply is provided to the development.	14.1.1 Provide water supply to each lot in accordance with the Preliminary Engineering Report at Annexure 11.	To ensure that an adequate potable water supply is provided.	Prior to release of the final Subdivision Certificate for each stage.	Responsibility: PM or N and Tweed Shire Council.				
15. Sewerage	15.1 To provide a reticulated sewer system to the estate.	15.1.1 Provide sewer supply to each lot in accordance with the Preliminary Engineering Report at Annexure 11.	To ensure that a public standard reticulation system is provided and minimise potential adverse impacts arising from pollution events on local water bodies.	Prior to the release of the final Subdivision Certificate for each stage.	Responsibility: PM or N and Tweed Shire Council.				
16. Contributions	16.1 Ensure that appropriate contributions are paid based on the demands generated by the subdivision.	16.1.1 Payment of relevant Section 94 Contributions and contributions required by the Voluntary Planning Agreement.	To achieve the objectives of the Environmental Planning and Assessment Act in relation to the levying of contributions and comply with Tweed Shire Council policies.	Prior to the issue of a Subdivision Certificate for each relevant stage.	Responsibility: PM or N and Tweed Shire Council.				
17. Mosquito Management	17.1 Mitigate impacts of mosquitoes on future residents.	17.1.1 Comply with the recommendations contained in Section 7 of the Amended Biting Insect Management Plan, HMC, April 2012 (Annexure 13).	To comply with the Tweed Development Control Plan 2008, Section A6 Biting Midge and Mosquito Control.	Prior to the issue of a Subdivision Certificate for each relevant stage.	Responsibility: PM or N.				
8. Voluntary Planning Agreement	18.1 Ensure that adequate infrastructure is provided.	18.1.1 Enter into a Voluntary Planning Agreement in general accordance with the Draft contained at Annexure I .	To enable contributions to be validly levied.	Prior to the issue of a Subdivision Certificate for the first residential lot.	Responsibility: PM or N and Tweed Shire Council.				
		18.1.2 Newland undertakes to pay the Minister's reasonable legal fees and associated costs for preparing and notifying the Planning Agreement.							

April 2013 (Revised October 2013)
Page 5 of 10

STATEMENT OF COM	STATEMENT OF COMMITMENTS									
Project Component	Environmental Outcome (Commitment) Measure (Commitment)		Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting					
19. Further Acoustic Assessment	19.1 Future dwelling houses on the nominated lots will require further acoustic assessment.	19.1.1 A Restriction on Use under Section 88B of the Conveyancing Act, 1919 – 1964 shall be created on each lot identifying the requirement for further assessment.	To mitigate adverse noise impacts.	Prior to the issue of a Subdivision Certificate for those lots abutting Fraser Drive for each relevant stage of the subdivision.	Responsibility: PM or N and Tweed Shire Council.					

Lot	Acoustic Assessment Required for the Ground Floor of Dwelling	Acoustic Assessment Required for the First Floor of Dwelling	Lot	Acoustic Assessment Required for the Ground Floor of Dwelling	Acoustic Assessment Required for the First Floor of Dwelling
122	Yes	Yes	201	Yes	Yes
123	Yes	Yes	202	Yes	Yes
124	No	Yes	203	Yes	Yes
125	No	Yes	204	Yes	Yes
126	No	Yes	205	Yes	Yes
127	No	Yes	301	Yes	Yes
128	No	Yes	302	Yes	Yes
129	No	Yes	303	No	Yes
130	No	Yes	304	Yes	Yes
131	Yes	Yes	324	No	Yes
132	Yes	Yes			
133	Yes	Yes			
134	Yes	Yes			
135	Yes	Yes			
136	Yes	Yes			
*137	No	Yes			
*138	Yes	Yes			
*139	Yes	Yes			
*140	Yes	Yes			
*141	Yes	Yes			
*142	No	Yes	•		

^{*} Stage 11 has now been included in Stage 1 such that there are now only 10 stages. The Stage 11 Lots have been renumbered from 137 to 141 (previously 102 to 107). The table above has been amended to refer to the correct Lot numbers, however, the Acoustic Report at Annexure 7 of the PPR refers to the former Stage 11 Lot numbers.

April 2013 (Revised October 2013)

Page 6 of 10

STATEMENT OF COM	STATEMENT OF COMMITMENTS									
Project Component	Medsure (C		Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting					
20. Groundwater and Surface Water	20.1 To manage and minimise potential groundwater and surface water impacts.	20.1.1 Comply with the conditions required by the NSW Office of Water as follows:	To mitigate potential groundwater impacts.	Prior to the issue of a Construction Certificate for each relevant stage of the subdivision.	Responsibility: PM or N.					

- 20.1.2 The applicant to prepare a Surface Water Management Plan in consultation with and to the satisfaction of the NSW Office of Water prior to the commencement of works.
- 20.1.3. The applicant to prepare a Groundwater Management Plan in consultation with and to the satisfaction of the NSW Office of Water prior to commencement of works.
- 20.1.4 The applicant to obtain the relevant licences to the satisfaction of the NSW Office of Water under the Water Act 1912 and the Water Management Act 2000 (whichever is relevant at the time application is made) for all activities that intercept or extract groundwater and surface water prior to commencement of these activities.
- 20.1.5 A site specific Acid Sulfate Soil Management Plan should be produced in accordance with the ASSMAC guidelines including investigations to a total depth of one metre past the base of the deepest excavation within the identified potential acid sulfate soil area (assumed to be the stormwater quality treatment device).
 - The documents to be prepared in Conditions 20.1.2 and 20.1.3 above will include where relevant the following:
- 20.1.6 Detailed groundwater assessment to include but not limited to the following:
 - Groundwater levels and flow direction within the development area and adjacent SEPP 14 wetlands;
 - Extent surface-groundwater connectivity within the drainage lines;
 - Degree of groundwater dependency of the SEPP 14 wetlands and the potential impacts of any changes to flow direction, quantity and quality of groundwater to the wetlands and Terranora Creek; and
 - Development of trigger levels for impacts of changes in groundwater quantity and quality.
- 20.1.7 A detailed surface water assessment for the adjacent SEPP 14 wetland and Terranora Creek to provide baseline data for determining trigger levels for changes in water quantity and quality.

21. Geotechnical	21.1 Ensure lots are stable and suitable for dwellings.	21.1.1 Comply with the recommendations of the Geotechnical Report at Annexure 20 of the Environmental Assessment (see below).	sites.	Prior to the issue of a Subdivision Certificate for each relevant stage of the subdivision.	Responsibility: PM or N.
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- 21.1.2 Failure to remove all areas of instability and implement adequate drainage prior to earthworks will result in saturation and weakening of the natural soils and fill, creating further instability in the form of slips, soil creep, erosion and soil consolidation. The drainage recommendations provided in the Morrison Geotechnic (Annexure 20 of the Environmental Assessment) report and outlined in the 'Recommendations for Site Development' below must be implemented to reduce the risk of slope instability and ensure the long term performance of the site. The recommendations are as follows:
- 21.1.3 In areas which are to be filled, all trees, grass, weed zones, uncontrolled fill, rocks and debris must be removed from the existing ground surface to expose the very stiff to hard, natural clay soil or weathered rock. Tree root matter typically extends to a depths ranging between 0.20m and 0.4m below the existing natural ground surface.
- 21.1.4 No filling or residential development should take place within any surface irregularities such as landslips, scarps, washouts or erosion features. If filling or development is to occur in these areas, surface irregularities must be removed prior to development and appropriate drainage provisions must be implemented in accordance with the recommendations described in Section 8.0 of this report. The unstable areas are typically limited to the main drainage channel in Unit 5, the drainage gully in the northern portion of Unit 4 and the lower portions of the Units 3 and 4.
- 21.1.5 If filling or residential development is to take place within the gullies or the main drainage channel in Unit 5, properly designed and constructed drainage systems or structures must be implemented. Prior to development within the drainage gullies or channels, the drainage feature should be dewatered and all soft/loose soil and slopewash soil should be removed from the base to spoil. Appropriate drainage measures must then be installed at the base of the drainage feature to maintain positive drainage. The drainage feature can then be filled by placing suitable fill materials in thin layers with each layer compacted to 95% SMDD for residential Lots and 100% SMDD below pavements. The above recommendations for the drainage features also apply to the dams in the southern portion of the main drainage channel in Unit 5, if this area is to be developed.

April 2013 (Revised October 2013)
Page 7 of 10

STATEMENT OF COMM	STATEMENT OF COMMITMENTS									
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)	Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting					

- 21.1.6 The fill behind the retaining walls and used in the construction of the batters is placed and compacted to 95% Standard Maximum Dry Density and is "Controlled Fill" in accordance with A.S. 2870 (Clause 6.4.2 (a)) "Residential Slabs and Footings" and A.S. 3798.
- 21.1.7 Filling should be benched into the sloping ground surface and supported by engineered retaining walls over the steeper slopes in Units 1 to 4. Fill slopes should be no steeper than 2(H):1(V) or 260 and be over-constructed and trimmed back to ensure compaction in the outer zones. Natural soil slope should also be no steeper than 2(H):1(V) or 260. Vertical heights of natural soil and fill batters should preferably not exceed 5.0m.
- 21.1.8 All permanent excavations exceeding 1.0m must be supported by adequately engineered retaining walls incorporating drainage or battered at appropriate angles stated in the dot point above. Retaining walls should also found in the natural soils or rock below all fill, colluvium and slopewash surficial soils prone to movement.
- 21.1.9 All retaining walls must be individually designed to have a factor of safety of at least 1.5 with respect to internal stability, including sliding and overturning. A global stability assessment of the proposed retaining wall sections should be carried out when detailed design for the retaining walls is finalised.
- 21.1.10 Earthworks should take account of the sloping terrain and be limited to cuts and fills which can be adequately constructed by medium sized civil contractors without resorting to specialised contractors.
- 21.1.11 Prior to any earthworks on site, an open drain should be constructed through the centre of the slip in the far northern portion of Unit 4 to dry out the wet swampy areas around the slip. This drain should extend back to the upper most slipped area and should lead to an approved outlet. After the wet areas have been mostly dried out, the colluvial material associated with the slipped area must be removed and the exposed residual soil benched and battered to appropriate angles and subsurface drains installed. These drains should form a permanent herringbone shaped drainage scheme with slotted pvc pipes lined with geofabric material and backfilled with gravel. The drains should extend beyond the backscarp of the slip and should intersect the contact between the volcanic soil and the Neranleigh Fernvale Geology.
- 21.1.12 The above drainage system should also be implemented along the main drainage channel in Unit 5 where emergent groundwater seepage is expected or in areas which display evidence of instability associated with the contact between the volcanic soil and the Neranleigh Fernvale geology. These areas of instability are expected to be typically encountered within the banks of the main drainage channel on the eastern side where access and visibility was limited. More detailed geotechnical investigation would be required to make an accurate assessment of the drainage requirements and the areas which require these provisions.
- 21.1.13 In areas where the roads traverse drainage features the installation of conduits such as pipes and culverts at the base of the fills may be required. In these areas soft soils, boulders and high water flows can be expected requiring appropriate design considerations.
- 21.1.14 The existing drainage lines should be maintained by installing conduits such as pipes and culverts at the base of the fills within the drainage corridors. Modification of the drainage corridors is acceptable providing positive drainage is maintained.
- 21.1.15 Lined surface contour drains must be constructed upslope of each lot to intercept and divert surface water flows into the stormwater system. This will reduce infiltration into the slopes and the potential for soil creep and erosion. For some Lots the road drainage system will be adequate.
- 21.1.16 Subsurface drains should be installed above all repaired landslip areas and gullies and along both sides of all on-grade road formations and cuttings.
- 21.1.17 Drainage must be implemented behind the crest of all cut and fill batters as well as behind retaining walls to reduce surface water flow over or into structural fills.
- 21.1.18 Drainage filter rock (footing to surface) is to be provided behind all retaining walls with a seepage pipe outlet to nominated gully pits.
- 21.1.19 Drainage filters are to be separated from the insitu clay or fill using the appropriate geofabric.
- 21.1.20 Stormwater and sewer pipe trenches should include a separate drain in the bedding medium leading to a defined outlet.
- 21.1.20 All lot runoff and roof water must be discharged into stormwater systems via a system of pipe conduits or lined drains to minimise water infiltration into the slopes. Alternatively roof water can be discharged into water tanks for storage.
- 21.1.22 After stripping the unstable slopewash soils and existing slip areas to expose the residual soils in areas to be filled, the foundation should be inspected to assess the requirements, if any, for subsoil trench drains. These may be required to maintain low groundwater conditions in areas of groundwater or surface water concentrations.
- 21.1.23 This office must be actively involved on-site during the repair of all landslips and other areas of instability.
- 21.1.24 Vegetation clearing must be kept to a minimum, in small section at a time, with revegetation commencing immediately after the completion of earthworks to minimum, in small section at a time, with revegetation commencing immediately after the completion of earthworks to minimum, in small section at a time, with revegetation commencing immediately after the completion of earthworks to minimum, in small section at a time, with revegetation commencing immediately after the completion of earthworks to minimum, in small section at a time, with revegetation commencing immediately after the completion of earthworks to minimum, in small section at a time, with revegetation commencing immediately after the completion of earthworks to minimum, in small section at a time, with revegetation commencing immediately after the completion of earthworks to minimum, and the completion of earthworks the completion o
- 21.1.25 The footings of the retaining walls must be founded in the rock or residual soils with a minimum allowable bearing pressure of 150kPa, rather than on colluvial soil.

April 2013 (Revised October 2013)
Page 8 of 10

STATEMENT OF COM	STATEMENT OF COMMITMENTS									
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)	Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting					

- 21.1.26 All footings shall found in the residual soil, weathered rock or structural fill, below all non structural fill, colluvium and slopewash soil and below a line extending up from the toe of all retaining walls at 300.
- 21.1.27 Where the geological contact zone is shallow, all footings must found within the Neranleigh Fernvale geology, below the contact.
- 21.1.28 No development should take place within any surface irregularities such as slips, scarps, washouts, erosion features or elongated rock mounds. If development is to occur in these areas, surface irregularities must be removed and repaired prior to development and the drainage improved.
- 21.1.29 No residential development should take place below the Council regulated design flood levels (Q100 Flood Level).
- 21.1.30 In all Topographic Units the Guidelines for Development and the attached Guidelines for Hillside Engineering (Appendix D) must be followed.
- 21.1.31 Slope sensitive residential design and construction, which minimises earthworks should be adopted for all Lots located on slopes with a surface gradient of greater than 15o. Slope sensitive design for housing includes conventional pole houses, concrete framed houses with suspended floors which overly the natural contours and split level on-grade raft slab floors and/or suspended floors. All footings should found in the residual soils or weathered rock below the soils which are suspect to downslope creep movement, and the structural design should ensure stiffness in the downslope direction eq. strip footings, slab beams or bearers aligned up and down the slope.
- 21.1.32 Regular site attendances by a geotechnical engineer or engineering geologist who is familiar with the constraints of the site and design and landslip remediation issues shall be undertaken during construction.
- 21.1.33 Level 1 earthworks supervision as defined in Australian Standard AS3798-2007 shall be implemented.

22. Soil Preservation Management Plan	22.1 To identify and manage the continued productivity of Class 6 soils.	22.1.1	Comply with the Soil Preservation Management Plan at Annexure 29 of the PPR.	To achieve the desired outcomes.	Prior to the issue of a Subdivision Certificate for each relevant stage.	Responsibility: PM or N.
23. Vegetation Management Rehabilitation Plan	21.1 Rehabilitation of environmental open space areas.	21.1.1	In accordance with the VMRP at Annexure 10, the following rehabilitation works shall be undertaken: • Rehabilitation within Lot 1001 will be completed by Newland prior to release of the Stage 7 Subdivision Certificate. • Management and monitoring shall be undertaken in accordance with Section 6 of the VMRP.	To achieve compensatory plantings and improved environmental outcomes.	Prior to release of the Stage 7 Subdivision Certificate.	Responsibility: PM or N.
24. Community Facility	24.1 Minimise impacts on residential amenity.	24.1.1	Hours of operation and use of amplifiers shall be controlled by the Owners' Corporation.	To achieve the desired outcome.	Ongoing.	Owners' Corporation.
		24.1.2	Flood lighting shall be shielded to minimise light spill and controlled by the Owners' Corporation.			

April 2013 (Revised October 2013)
Page 9 of 10

STATEMENT OF COMMITMENTS						
Project Component	Environmental Outcome (Commitment)	Measure (Commitment)		Purpose of Measure	Timing for Completion	Responsibility for Each Commitment, Monitoring and Reporting
25. Maintenance of Casual Open Space and Drainage Reserve	25.1 To achieve a higher standard of maintenance.		Newland Developers Pty Ltd will maintain the casual open space and drainage reserve by way of regular mowing.	To achieve the desired outcome.	For a period of 2 years after the land is dedicated or such longer period as Newland deems appropriate.	Responsibility: PM or N.
26. Easements for Water and Sewer	26.1 To provide legal access to water and sewer infrastructure owned by Council.		Normal easements 3m wide will be created over water and sewer infrastructure owned by Council which is location on private land.	To achieve the desired outcome.	To be included on the Plan of Subdivision for each stage.	Responsibility: PM or N.
27. Comprehensive Water and Sewer Report	27.1 To provide an integrated water and sewer strategy.		A comprehensive water and sewer strategy will be provided to Council.	To achieve the desired outcome.	Prior to the issue of a Construction Certificate for Stage 1.	Responsibility: PM or N.
28. Remediation of Contaminated Land	28.1 To remediate the site in accordance with the Site Analysis Quality Plan and Remediation Action Plan		The site will be remediated in accordance with the Remediation Action Plan	To ensure the site is suitable for the proposed use.	The Sampling Analysis and Quality Plan shall be implemented prior to the issue of a Construction Certificate for bulk earthworks and the Remediation Action Plan shall be implemented and a Site Audit Statement issued by an Accredited Site Auditor prior to the issue of a Subdivision Certificate.	Responsibility: PM or N.

April 2013 (Revised October 2013)
Page 10 of 10