JRPP No.	2010HCC008
DA No.	582/2010
Proposed Development	Road – Cycleway - Stage 5 of Fernleigh Track, 8A Cowlishaw Street Redhead 1A and 2 Railway Parade Belmont, Lots 1 and 2 DP 573398 and Lot 5 DP 592876
Applicant	Lake Macquarie City Council
Owner:	Lake Macquarie City Council and Newcastle City Council
Author	Lake Macquarie Council

Lodged:	15 April 2010		
Value:	\$2 million		
Consent Authority:	Joint Regional Planning Panel		
Concurrence Body:	Department of Planning (SEPP 14)		
Integrated Body:	Mine Subsidence Board		
Referral Agencies:	National Parks and Wildlife Service		
	Department of Environment, Climate Change and Water		
Exhibition:	26 April 2010 to 31 May 2010		

PRECISE

The development proposal is for the construction of the fifth, and last, stage of the Fernleigh Track – shared cycle and pedestrian path. Stages 1, 2 and 3 from Park Avenue, Adamstown in the north to the northern area of Redhead, have been constructed. Stage 4 has had development consent and construction works have now commenced. Stage 5 of the Fernleigh Track will see the construction of an additional 3.35 km of track and will complete the Fernleigh Track, creating over 15 km of shared cycle and bike pathway.

Stages 4 and 5 are partly funded under the Economic Stimulus Package and as such are subject to strict delivery times. Conditions on this funding require completion of construction of Stage 5 by 31 December 2010.

The land is zoned 5 Infrastructure under Lake Macquarie Local Environmental Plan 2004 which allows, with development consent, the construction of roads.

The development is considered Designated Development pursuant to the Environmental Planning and Assessment Regulation 2000. It is partly located within land identified under State Environmental Planning Policy No. 14 – Coastal Wetlands (SEPP 14) as a coastal wetland.



<u>Above:</u> Figure 1 – Location of Stage 5 of Fernleigh Track

Location

The site is located between the suburbs of Redhead, in the north, and Belmont, in the south. Stage 5 of the Fernleigh Track is proposed along a former railway corridor. The northern extent of the site is defined by the intersection of the railway corridor with Kalaroo Road, Redhead. The corridor follows a generally north east / south west trajectory toward Belmont. Nine Mile Beach is located to the east of the track with both sides of the track being bound by bushland. To the south and west of the track are wetlands with part of the site intersecting SEPP 14 wetland. The southern extent of the track is the Belmont Railway Station, located on the corner of Railway Parade and Alick Street, Belmont. Figure 1 above shows the location of the track.



Above: Figure 2 - Aerial Photograph of Stage 5 of Fernleigh Track

The Assessment

This report provides an assessment of the material presented in the application against all relevant State and local planning legislation and policy.

SECTION 79C: POTENTIAL MATTERS FOR CONSIDERATION

79C(1)(a)(i) the provisions of any Environment Planning Instrument (EPI)

State Environmental Planning Policy 14 – Coastal Wetlands (SEPP 14)

The aim of this policy is to ensure that the coastal wetlands are preserved and protected in the environmental and economic interest of the State. SEPP 14 applies to this development as part of the southern extent of Stage 5 of the Fernleigh track traverses SEPP 14 wetland no. 867, which is located within the Belmont Wetland State Park (BWSP). The wetland is described in the Plan of Management for the State Park as follows:

SEPP 14 wetland 867 (64.0 ha) occurs in the southern section of the park that connects with Belmont Lagoon. It is reported as being in relatively good condition with the large core area undisturbed. Fringing vegetation has been compromised by clearing and weed competition at the urban interface however species and habitat integrity were recorded as high. This wetland has been dissected by the Fernleigh Track, however the biological integrity was described by URS as having recovered (URS,2000).

SEPP 14 requires that any works or development on land classified as a SEPP 14 Wetland may only be carried out with the consent of the local council and the concurrence of the Director – General of the Department of Planning. SEPP 14 classifies development within the SEPP 14 wetland as designated development for the purposes of the Act, requiring an Environmental Impact Statement (EIS) be prepared for the development. It should be noted that the SEPP 14 wetland was dissected when the railway was first constructed.

The Director General of the Department of Planning issued his concurrence in relation to Clause 7(1) of SEPP 14, on 15 June 2010, subject to the following conditions:

- Further research and measurement is to be carried out on local flood characteristics prior to and during construction
- Adequate drainage is to be provided to ensure existing standing water levels and drainage times are maintained in the northern area of the swamp
- Any sections that are identified as prone to flooding should be marked with warning signs.

SEPP 14 requires that the development have regard to the environmental effects of the proposed development. The proposed cycleway is to be located within the existing railway embankment, which is considered a logical use of this area, as the area is already disturbed and substantially cleared of vegetation because of the former operations of the railway. In order to protect the important ecological features on either side of the proposed cycleway and existing embankment the cycleway has been kept to three metres in width, but narrowed in specific sensitive locations and widened in other less sensitive areas, where passing bays can be accommodated. The tree report submitted with the application details that a maximum of 14 trees will be required to be removed to accommodate the cycleway. The proposal will not affect the provision and quality of habitats for indigenous or migratory species; effectively these existing habitats will remain unaltered. Council's Development Planner (Flora and Fauna) has reviewed the Ecological Review and concurs with the conclusions in the report.

SEPP 14 requires consideration of whether adequate safeguards and rehabilitation measures have been, or will be, made to protect the environment. Substantial efforts have been made to protect the environment by avoiding and protecting the natural environment as far as is possible, using boardwalks in the most sensitive areas to control use of the area. Sensitive construction techniques are proposed in areas of exposed tree roots. It is also proposed to maintain subsurface water flows in particular areas and use construction techniques such as maintaining sediment and erosion control structures.

The development is consistent with the aims of the SEPP, which is to protect and preserve wetlands. This has been demonstrated by sympathetic construction techniques proposed for the development and the use of an already disturbed area of the wetland, in the former railway corridor. The development complies with the objectives and major goals of the "National Conservation Strategy for Australia" as far as the objectives relate to wetlands and conservation of "living resources". In this regard, the proposal will create a significant recreational resource for the community. By creating a low impact, car-free means of traversing the Belmont Wetlands State Park, users of the path will be able to better appreciate the inherent beauty and values of the wetland. This accords with a major goal of the National Conservation Strategy for Australia.

Consideration has been given to whether there are any feasible alternatives to the carrying out of the development. There are no other feasible alternatives to the construction of the cycleway in this location. The cycleway is located in the most feasible location being the disused railway embankment, which has provided a relatively ready-made structure upon which to construct the proposed cycleway with minimal impact on the surrounding wetland and surrounding vegetation.

The proposal is sympathetic to the wetland environs and is expected to result in negligible impacts to the surrounding wetlands.

The EIS has demonstrated that the proposal satisfies the matters for consideration by the Director-General under SEPP 14. In this regard the Director General has granted conditional concurrence to the development.

At the time of writing this report the National Parks and Wildlife Service had not responded to Council's letter dated 16 April 2010.

State Environmental Planning Policy 44 – Koala Habitat Protection (SEPP 44)

SEPP 44 encourages the conservation and management of natural vegetation areas that provide habitat for koalas to ensure permanent free-living populations will be maintained over their present range. The SEPP requires an investigation of core koala habitat on the site. The SEPP is relevant to this development proposal because the development covers an area greater than one hectare in area, there is a record of a koala within 10km of this site from the Wildlife Atlas (South Belmont), and the site has one listed koala feed tree under SEPP 44 (*E. robusta -Swamp Mahogany*). The applicant in support of the development. The assessment states that although primary feed trees such as Swamp Mahogany occur on the site, no scats or koala sighting occurred during the site survey and therefore the site may be classified as potential koala habitat.

The ecological reporting conducted by the applicant recommends that Swamp Mahoganies be retained where possible. This recommendation has been incorporated into the design of the proposed track and only two Swamp Mahogany feed trees are required to be removed to accommodate the development. A further four trees are identified as requiring further arborist advice regarding their removal (tree roots cross the path and may cause damage to the track in the long term).

Council's Flora and Fauna Planner has reviewed the development. She has not objected to the proposal in regard SEPP 44. The likely impact of the development on koala habitat is considered to be low.

State Environmental Planning Policy 71 - Coastal Protection (SEPP 71)

SEPP 71 seeks to ensure that development within the NSW Coastal Zone is appropriate and suitably located and aims to protect and preserve sensitive parts of the NSW coastal zone.

The proposed cycleway is provided within an existing railway easement, which has been previously disturbed, cleared, and raised above the surrounding wetlands. The cycleway provides low impact access for the community to the wetland. There will be opportunities to observe and experience the cultural and natural values of the wetland and disused railway, without impact on the visual amenity of the coast. The development of the cycleway will also assist in protecting and managing the natural, cultural, and recreational attributes of the New South Wales coast.

The cycleway will provide improved and formalised public access to the coastal foreshore via an existing relatively disturbed area being the former railway line. The development provides for a new opportunity for public access to and along the coastal foreshore whilst being compatible with the natural attributes of the coastal areas.

The EIS prepared in conjunction with the development application addresses the impact of the development on the surrounding vegetation, in particular, the wetland and EEC. Due to some regrowth that has occurred along the track up to 14 trees will be required to be removed to accommodate the development. Design measures include the provision of a 250m length of boardwalk that will reduce damage to tree roots in a particularly sensitive length of the track. The overriding objective of the proposal is not to alter the existing hydrology regime of the existing wetlands. In order to achieve this, the existing culverts through the old railway embankment will be maintained. As such, the development is not likely to have any impact on coastal process. Similarly, coastal hazards are not likely to have any adverse impacts on the proposed development.

The track has provided for fair and equitable access for people of all abilities. The track is wide enough to enable two wheelchairs to pass. The development proposal will not crate any overshadowing or loss of views due to the construction in a former rail corridor. There are no significant water based coastal activities within proximity to the proposed track that may create a conflict between the water based activities and land based activities.

Appropriate stormwater and erosion and sediment controls are also proposed as part of the development to ensure and maintain water quality. A Statement of Heritage Impact (SOHI) was prepared in support of the application. The SOHI concludes that the development will not affect items of heritage, archaeological or historic significance. Council's Heritage Planner is satisfied that the development will not adversely affect the conservation and preservation of items of heritage, archaeological or historic significance. In addition, the development will not hinder the protection of cultural places, values, customs, beliefs, and traditional knowledge of Aboriginals.

The development of the land for a shared pathway will have positive cumulative impacts on the environment due to the development providing an alternative mode of transport as well as an alternative for exercise, which may encourage appreciation of the surrounding environment.

Lake Macquarie Local Environmental Plan 2004 (LMLEP)

Clause 16 Development Consent – matters for consideration

(a) Lifestyle 2020 Vision, Values and Aims

In considering this application Council must have regard to the following vision, values and aims of the Lifestyle 2020 Strategy as expressed in Part 2 of the LMLEP:

Vision

The vision for land to which this plan applies is described in the Lifestyle 2020 Strategy, which is available from the office of the Council.

Values

The 4 core values of that strategy are sustainability, equity, efficiency and liveability.

Aims

The aims of the Lifestyle 2020 Strategy are to:

- (a) provide the community with realistic expectations about the future development patterns for land in Lake Macquarie City, while retaining flexibility for land use decision making in the longer term, and
- (b) reinforce and strengthen centres so that a wide range of commercial and community services may be provided in a timely and accessible manner, and
- (c) provide local employment opportunities for residents and promote economic development consistent with the City's natural, locational and community resources, and
- (d) guide the development of urban communities that are compact, distinct and diverse and include a range of housing types and activities, and
- (e) achieve a strong sense of positive community identity, through the development of local communities that are safe and liveable and offer a diversity of uses, economic opportunities and ready access to services, and
- (f) develop an attractive urban setting for the City which reflects its physical and natural environment, and visual character, and
- (g) manage the City's natural environment so that its ecological functions and biological diversity are conserved and enhanced, and contribute to the City's overall well being, and
- (h) manage the City's heritage and economic resources in a way that protects the value of these resources and enhances the City's character, and
- (i) integrate land use with the efficient provision of public and private movement systems.

The former Adamstown to Belmont railway corridor is ideal for use as a shared cycleway and pedestrian track. The corridor allows for a safe route and recreational facility for cyclists and pedestrians between the former Jewells Crossing (Wommara Station area) at Railway Crescent in Belmont North and the former Belmont Railway Station at Railway Parade, Belmont. The use of the former rail corridor will not detract from the visual setting nor will affect

surrounding residential uses that would adversely affect the liveability or quality of life of residents in the area, alternatively the development provide a quality asset to the residents of the area for their use as a transport mode or recreational tool.

The development proposal has had regard to the natural environment of the area such that the ecological functions and biological diversity will not be adversely impacted by this development. The development will provide for opportunities for the community to be exposed to part of Lake Macquarie's vast ecological assets.



Above: Figure 3– Zoning of the land – LMLEP 2004

(b) Objectives of Zone

- The land is zoned 5 Infrastructure zone (see Figure 4 below). The objectives of this zone are to:
 - a) provide land for future infrastructure needs such as roads, drainage and other utilities, and
 - b) provide land required for the expansion of existing community facilities or the development of new community facilities, and

- c) provide for limited development within the zone where it can be demonstrated that the development will not prejudice or have the potential to prejudice the intended future infrastructure development of that land, and
- d) ensure that development on adjacent or adjoining land zoned infrastructure does not prejudice future infrastructure development within that zone, and
- e) provide for sustainable water cycle management.

The development is for a road. A "road" is defined under Lake Macquarie Local Environmental Plan 2004 as:

Road means a public thoroughfare used for the passage of vehicles, pedestrians or animals and includes:

- a) the airspace above the surface of the road, and
- b) the soil beneath the surface of the road, and
- c) any bridge, tunnel, causeway, road-ferry, ford or other work or structure forming part of the road.

The use of the land for a road complies with the objectives of the zone.

Clause 17 Provision of essential infrastructure

The development is able to be serviced by the required infrastructure.

Clause 31 Erosion and sediment control

The erosion and sediment control plan measures detailed in Appendix 8 of the Environmental Impact Statement (EIS) lodged with the application has been assessed by Council's Erosion and Sediment Control Officer who advises that the detail is sufficient for the scope of works, and no additional erosion and sediment control measures are required.

Clause 32 Flood prone land

The land is flood prone. Records of flood levels along most sections of the proposed track are poor, and the area has not been the subject of catchment – wide flood studies. However, it is known that Scubby Creek and Jewells Swamp have a history of flooding, and can experience powerful, high velocity flows in the creek channel.

The low lying wetland areas south of Kalaroo Road are also subject to periodic inundation, although the flow velocities are generally low.

Council's Climate Change Adaptation Officer has advised that the proposed construction methods and materials will ensure the track is stable even when inundated. However, the Officer requires that further research and measurement be carried out prior to and during construction and, before

opening the track for public use, and that any sections identified as prone to flooding should be marked with warning signs. Sections that may be subject to hazardous flows (based on depth and velocity – NSW Floodplain Development manual) should have depth indicators. These comments accord with the requirements of the Department of Planning as their conditions in granting their concurrence. The applicant has advised that they will provide warning signs of possible flooding in major storm events, which will be installed at:

- CH 4525 adjacent to the maintenance vehicle turn around facility;
- CH 5300 and CH5420, each side of the existing access track from George Street, Belmont (George Street Fire Trail access track); and
- CH5700 adjacent to the former Belmont Station platform.

Clause 33 Bush fire considerations

The land is bush fire prone, however the use of the land for a road is not a Special Fire Protection purpose, and the application is not Integrated Development. In addition, the application was referred to the NSW Rural Fire Service. The NSW Rural Fire Service advises that the proposal is satisfactory.

Clause 34 Trees and native vegetation

The development includes the removal of up to 14 trees to ensure the safety of the users of the track. The EIS has provided a clear indication of the trees to be retained / trees to be removed on the Tree Removal / Tree Retention Plan. In addition, effort has been made in the development proposal to minimise impact to native vegetation and hydrological flows along the proposed cycleway alignment by locating the cycleway along the existing disturbed easement and by integrating sections of boardwalk to minimise impact to tree root systems. Council's Flora and Fauna Planner raised no objection to the proposed development.

The development proposal will comply with this clause.

Clause 35 Acid sulfate soils

The site is located within an area where there is occurrence of potential acid sulfate soil materials. An Acid Sulfate Soils Investigation and Management Plan has been prepared for the application. The Plan has shown that there is the potential for acid forming conditions upon oxidation for 38 of the 47 samples tested, and that the shallow soils (generally fill) at all sites did not indicate results in excess of the action criteria. It is noted that the project is likely to disturb less than 1000 tonnes of soil.

The reports recommend that any disturbance and excavation of the natural profile at Bridge 3 be undertaken in accordance with the Acid Sulfate Soils Management Plan submitted in support of the application.

The development adequately addresses acid sulfate soils in accordance with this clause.

Clause 44 – Protection of heritage items and heritage conservation areas and Clause 47- Assessment of heritage significance and cluse 51 – Development affecting known or potential archaeological sites or relics of European heritage significance

The heritage impact of the amended landscape plans have been assessed by High Ground Consulting, specifically the impact of the development on the Belmont platform and the Jewels Crossing platform in the Statement of Heritage Impact (SHI).

The major concern raised by the May 2010 SHI related to the loss of the entire existing facing of the Belmont platform wall. This has been responded to in the current design, which retains a 5.5m length section of the wall and is addressed in the current documentation. The correspondence and discussions with the landscape architect and High Ground Consulting confirmed that:

• 'the works proposed represent a good compromise'.

The current landscape plans also include a *Heritage Items Schedule of Works and clearly mark the location of items on the platform drawings.*

The submitted SHI for the Jewells (Wommara) & Belmont Rail Platforms, dated 31 May 2010 by High Ground Consulting in conjunction with the email correspondence is considered sufficient for addressing heritage considerations.

Council's Development Planner – Heritage Focus has assessed the proposal against the requirement of the SHI. She has advised that the proposal will not adversely impact on the cultural heritage significance of the former railway line and platforms, subject to implementing the conservation and interpretation policies of the Statement of Heritage Impact, Fernleigh Track Stage 4 & 5, High Ground Consulting, 1 October 2009.

Clause 50 – Development affecting places or sites of known or potential Aboriginal heritage significance

A due diligence field survey and assessment for Aboriginal cultural heritage has been undertaken for the development. The Aboriginal Heritage Information Management System (AHIMS) identifies an open campsite (recorded by Dyall in 1972), located near the proposed Stage 5 of the Fernleigh Track. Using the AHIMS co-ordinates, the area has been investigated with no evidence of Aboriginal cultural material being located at the nominated location. Given the proximity to the former Adamstown to Belmont railway line it is unlikely that the Aboriginal items would have been located there. Further investigation of this matter has revealed that the site identified by Dyall is likely to be located further to the north as part of a residential subdivision off Dirkala Close, Belmont North. The presence of fragments of cockle shell in a reserve at that location confirms that this is most likely the site described by Dyall in his recordings.

The application has adequately addressed Aboriginal heritage.

Clause 56 – Interim development of land required for community purposes

The land is zoned 5 and is presently in Council's ownership. The development of this land for the use as a "Road" as Stage 5 of the Fernleigh Track is in accordance with zone objectives and is otherwise in accordance with this plan.

Clause 60 – Development on land adjoining Zones 5, 7(1), 7(4) and 8

The land does not adjoin land zoned 5 rather the subject land is zoned 5. The development of the land is in accordance with Council's plans for this land, to enable the continuation of the Fernleigh Track as part of the NSW Coastline Cycleway, which is coordinated by the Department of Planning. The route of the cycleway runs from the Queensland border along the east coast of NSW with the ultimate objective of making cycling possible along the entire east coast of NSW.

The proposed cycleway fulfils the strategic directions of the NSW Coastline Cycleway project and complies with the Zone 5 objectives.

79C(1)(a)(ii) the provisions of any draft EPI

There are no draft Environmental Planning Instruments applicable to the site or the development.

79C(1)(a)(iii) the provisions of any Development Control Plan (DCP)

Development Control Plan No. 1 – Principles of Development

Section 1.8 – Development Notification Requirements

As required by the EPA Regulation 2000, relevant government bodies notified, include:

Newcastle City Council;

EnergyAustralia;

Roads and Traffic Authority;

Hunter Water Corporation;

Rural Fire Service;

Land and Property Management; and

Industry and Investment NSW.

At the time of writing, Newcastle City Council, Hunter Water Corporation, Land and Property Information and Roads and Traffic Authority had not responded to the application.

EnergyAustralia advised of no objections on 12 May 2010.

The NSW Rural Fire Service advised of no objections on 19 May 2010.

Industry and Investment NSW advised on 12 May 2010 that their response was a coordinated response from the Mineral Resources and Fisheries divisions of

the former Department of Primary Industries, now part of Industry and Investment NSW (I&I NSW). I&I NSW advised that the matters that need to be addressed by the proponent include sediment erosion control and stormwater management. They also advised that the potential for reconstruction of some minor waterway crossings also needs to be assessed which may require a permit to dredge and reclaim. At this stage, the development proposal will not require a permit.

An advertisement was placed in the Herald (Newcastle) on two occasions, and signs were placed on the site at the beginning and end of the former railway corridor where the corridor is in closer proximity to surrounding residences. The exhibition period was 26 April 2010 to 31 May 2010.

Adjoining and adjacent neighbours were notified of the proposal. One submission was received. The submission does not object to the development but raises issues that should be considered as part of the assessment process. The details of this submission are addressed at section 79C(1)(d) of this report.

Section 2.1 – Environmental Responsibility and Land Capability

<u>2.1.1 – Ecological Values, 2.1.2 – Ecological Corridors, and 2.1.4 – Tree</u> <u>Preservation and Management</u>

Council's Flora and Fauna Development Planner has reviewed the application, including engineering plans, landscape plans and environmental impact assessment, and advises as follows:

Where required the application has been assessed for compliance with ecological requirements / recommendations detailed in the LMCC LEP (2004), DCP 1, TSC Act (amended 2004), Lake Macquarie Flora and Fauna Survey Guideline (2001), Lake Macquarie *Tetratheca juncea* Management Plan (Payne 2001), Lake Macquarie Wetlands Management Study, Lake Macquarie Coastal Management Plan, SEPP 14, 19, 26 & 44, FM Act 1994 and EPBC Act 1999.

Effort has been made to minimise impact to native vegetation and hydrological flows along the proposed cycleway alignment by:

- locating the proposed cycleway along an existing disturbed easement;
- integrating sections of boardwalk to minimise impact to tree root systems; and
- providing clear indication of trees to be removed and trees to be removed on the Tree Removal / Retention Plan.

The Development Planner advises that there is no objection to the development proceeding on ecological grounds subject to a condition requiring retention of native vegetation and vegetation protection requirements. This opinion is concurred with.

2.1.3 - Scenic Values

The proposed development will have no adverse impacts on the surrounding area or view catchments. The development will utilise the existing embankment of the former Adamstown to Belmont railway and will integrate well with the natural bushland. Upon completion, Stage 5 of the Fernleigh Track will provide opportunities for the public to appreciate the surrounding natural habitats. The scenic values of the area will be maintained.



<u>Above:</u> Figure 5 - View along area of proposed Stage 5 of Fernleigh Track



<u>Above:</u> Figure 6 - View along area of proposed Stage 5 of Fernleigh Track

2.1.5 - Bushfire Risk

Bushfire risk has been addressed previously in this report under Clause 33 of LMLEP 2004.

2.1.6 - Water Bodies, Waterways and Wetlands

The proposed development is located within the vicinity of and adjacent to wetland communities. The development will discharge, via sheet flow, to the adjacent bushland.

Council's Environmental Planning Department have commented on the proposal and advised that the development has used various construction methods that will ensure retention of the existing hydrological regime and hence reduce the impact on the surrounding drainage lines and creeks. The construction methods used include:

- retention of bridges using existing abutments, which will ensure maintenance of the current flow regime, whilst the use of existing abutments prevents any modification to the creek bed or banks;
- retention of existing culverts; and

• boardwalk installation over the Endangered Ecological Community that is highly dependent on the water regime.

Much of the site is within an embankment situation; hence, table drains are not required. For the safety of users, sealed shoulders are necessary throughout the project. The development does not propose the use of bitumen seal on any table drain areas. Any table drains required are to be stabilised using native plants and in areas where erosion is of more concern, rock lining or a combination rock lining and planting is to be used. A condition of consent can require that any re-shaping is to achieve a shallow, flat profile. Deep v-shaped drains should be avoided, and alternatives to bitumen spray are considered necessary. This will ensure that water velocities are not increased and will reduce the incidence of hard (bitumen) surfaces and soft surfaces (such as creek banks and natural drainage channels) meeting, as this is typically where erosion can occur.

The purpose of the aggregate sub-base layer beneath the concrete pavement CH4260 – CH4340 is for tree root protection, which is specified within the Arborist report submitted with the application. It is not envisaged that the proposal will change in any way water velocities or groundwater flow. The purpose of the boardwalk section is to protect the adjoining endangered ecological community and minimise impact to tree-root systems.



<u>Above:</u> Figure 7 - SEPP 14 wetland in the vicinity of proposed Stage 5 of Fernleigh Track

<u>2.1.7 – Flood Management</u>

Flood management has been addressed previously in this report under Clause 32 of the LMLEP 2004.

2.1.8 – Development on Flood Prone Land at Dora Creek

Not applicable.

2.1.9 Sloping Land and Soils

The site is not identified as being within a geotechnical zone on Council's Geotechnical Maps, as such further geotechnical investigation is not required. The development does not propose any significant cut or fill to accommodate the development.

2.1.10 - Acid Sulfate Soils

Acid sulfate soils have been addressed previously in this report under Clause 35 of the LMLEP 2004.

2.1.11 - Erosion Prevention and Sediment Control

Erosion prevention and sediment control issues have been addressed previously in this report under Clause 31 of the LMLEP 2004.

2.1.12 - Mine Subsidence

The Mine Subsidence Board have endorsed the plans of the proposal and have raised no objection to the development.

2.1.13 - Contaminated Land

The land is not known to be contaminated; however, a condition of consent regarding contamination can be included in the consent.

2.1.14 - Energy Efficiency

Not applicable.

2.1.15 - Noise and Vibration and 2.1.16 - Air Quality and Odour

Not applicable.

2.1.17 Building Waste Management

Not applicable.

Section 2.2 – Social Impact

The development will have significant positive community benefits for the wider community. The development reflects and enhances the neighbourhood character and the social and cultural characteristics of the community. Provision of an alternative mode of travel creates a greater quality of life for individuals and for the communities as a whole. The cycleway / pedestrian path creates a significant open space asset which allows the community to come together and enable a certain amount of pride in the assets of the area.

Section 2.3 – Economic Impact

Not applicable.

Section 2.4 - Heritage

European Heritage

European heritage issues have been previously addressed and considered in this report under Clause 44 of the LMLEP 2004.

Aboriginal Heritage

The Aboriginal Heritage Information Management System (AHIMS) identifies an open campsite (recorded by Dyall in 1972), located near the proposed Stage 5 of the Fernleigh Track. Using the AHIMS co-ordinates, the area has been investigated with no evidence of Aboriginal cultural material being located at the nominated location. Given the proximity to the former Adamstown to Belmont railway line it is unlikely that the Aboriginal items would have been located there. Further investigation of this matter has revealed that the site identified by Dyall is likely to be located further to the north as part of a residential subdivision off Dirkala Close, Belmont North. The presence of fragments of cockle shell in a reserve a that location confirms that this is most likely the site described in Dyall in his recordings.

A due diligence field survey and assessment for Aboriginal cultural heritage has been undertaken for the development. The review of the *"Fernleigh Track Stages 4 and 5 Assessment of Historical Archaeology and Statement of Heritage Impact and Aboriginal Cultural Heritage due Diligence Assessment"* prepared by Loraine Nelson, Archaeologist, and dated 1 March 2010 addresses the Aboriginal heritage assessment and impact requirements. It concludes that if proposed works remain within the footprint of the redundant Adamstown to Belmont Railway line embankment that it is unlikely that there would be impact on Aboriginal cultural heritage sites. It makes recommendation to include conditions of consent in the likelihood of uncovering any Aboriginal cultural materials or skeletal remains, which will be included in the conditions of consent. Council Heritage Planner – Heritage Focus has raised no objection to the development subject to the inclusion of conditions of consent in the likelihood of uncovering any Aboriginal cultural materials or skeletal remains.

The application was referred to the NSW Aboriginal Land Council and the Bahtabah Local Aboriginal Land Council, however at the time of writing this report; responses had not been received from both organisations.

Conditions of consent will be applied to the consent that requires compliance with the recommendations of the assessment of Aboriginal archaeology.

The application has adequately addressed Aboriginal heritage.

Section 2.5 – Stormwater Management, Infrastructure and On-site Services

2.5.1 - Essential Infrastructure

The site is fully serviced with essential infrastructure.

2.5.2 - On-Site Wastewater Treatment

On-site waste water treatment is not required for the development.

2.5.3 - Stormwater Management (Drainage System Design) and 2.5.4 - On-Site Stormwater Harvesting (Source Controls)

Council's Chief Subdivision Engineer has advised that suitable stormwater management measure have been incorporated into the design.

These measures are considered adequate to demonstrate compliance with DCP 1 and are supported.

2.5.5 – Waste Management for Multi-Unit Dwellings

This section is not applicable to this development

Section 2.6 – Transport, Parking, Access and Servicing

2.6.1 Movement System

This section is not applicable to this development.

2.6.2 Traffic Generating Development

Although not identified as Traffic Generating Development under SEPP (Infrastructure) 2007, the application was referred to the RTA. At the time of writing this report the RTA had not responded.

2.6.3 Road Design

While the development proposal is for a "road" as defined under the LMLEP 2004, the provisions of this section of the DCP do not specifically relate to this development. This development does however provide for a safe and efficient method of travel between Redhead and Belmont for walkers and cyclists, which will meet the needs of the users.

2.6.4 – Pedestrians and Cyclists

The intent of this control is to ensure the provision of accessible well-located and designed pedestrian and cycle paths. The proposed "road" is specifically is for a pedestrian / cycleway separate to other vehicular traffic that will cater for the needs of cyclists and pedestrians.

The completion of Stage 5 of the Fernleigh Track will complete this phase of the Newcastle / Lake Macquarie Bike Plan 1996. The Bike Plan recommends comprehensive and staged development of future cycle projects with the aim of creating a safe and convenient cycleway network. The Fernleigh Track forms part of the regional cycleway from Adamstown to Belmont.

This part of the Track is generally flat with no sharp turns or 'blind spots". The alignment of the path provides for visual interest, whilst maintaining trees and other vegetation and is located to protect the natural watercourses, SEPP 14 wetland and other significant features such as the EEC located within the area.

The width of the path is sufficient to allow the safe passing of cyclists and pedestrians and has been designed to widen at places of potential conflict points. As presently designed the track provides a cost effective way of cycle and pedestrian access from Redhead to Belmont using the former Adamstown to Belmont rail corridor. This stage of the project has joint funding from the Federal Government (under the Nation Building and Jobs Plan Act) and Local Government (Newcastle and Lake Macquarie City Council). Conditions of the Federal funding mean that Stages 4 and 5 of the cycle way must be completed by 31 December 2010.

The development complies with the intent of this section.

<u>2.6.5 – Public Transport</u>

This section is not applicable to this development.

2.6.6 Vehicle Parking Provision

The intent of this control is to ensure that development is provided with adequate and well designed on-site parking.

Carparking is provided at both Railway Crescent / Kalaroo Road, Redhead area (12 spaces) and at Railway Parade, Belmont area (33 spaces) of Stage 5 of the track. The carparking areas at the Redhead and Belmont ends of the track have been approved under Stage 4 (DA/1652/2009) of the track and are not part of the present application. The 33 parking spaces provided are anticipated to meet the expected demand of the facility.

The provision of car parking in these locations, where the track intersects with public areas, is appropriate for the development. The proposal meets the intent of this control.

2.6.7 Car Parking Areas and Structures

Council's Chief Development Engineer has commented on the proposed car parking and advised that the car parking areas are adequate for the development and comply with DCP 1 requirements including AS 2890.1.

2.6.8 Vehicle Access

Council's Chief Subdivision Engineer advises that the proposed access and sight distances to the proposed development from Kalaroo Road are satisfactory.

2.6.9 - Access to Bushfire Risk Areas

This matter has been previously addressed in Clause 33 of the LMLEP 2004.

2.6.10 - Servicing Areas

This development does not require servicing areas.

2.6.11 On-Site Bicycle Facilities

The intent of this requirement is to provide greater modal choice through the provision of on-site bicycle facilities within retail, commercial, community and industrial developments. This stage of the Fernleigh Track links the suburbs of Redhead, Jewells and Belmont North to the commercial area of Belmont, thus providing alternate modes of transport for both visitors and residents of the area.

2.6.12 Non-Discriminatory Access and Use

The intent of this control is to ensure equitable access for all members of the community. Council's community planning section have provided comment on the development and advised that the construction certificate plans appear to comply with AS 1428 in relation to ramps and pathways.

Seating compliant with AS1428.2 is to be provided at 500 metre intervals along the pathway, a condition of consent will apply in this regard.

The development proposes equitable access to a cross section of the community and therefore meets the intent of this section.

Section 2.7 – Streetscape and the Public Realm

2.7.1 - Streetscape and Local Character

The development will reinforce and create additional connectivity to the existing street network. The development responds to needs for alternative travel paths for pedestrians and cyclists, which will link several suburbs to the north of Belmont with Belmont Town Centre.

2.7.2 Landscape

The intent of this control is the provision of quality site landscaping appropriate to the nature and scale of the development proposal that will enhance the City amenity. Council's Landscape Architect has requested that the bike racks at various locations along the track accommodate a minimum of two bikes. With regard the Wommara or Jewels Platform a condition is required that advises of protection measures with the gabion structure in the Wommara Platform treatment to avoid future maintenance difficulties on rubbish control.

With the implementation of the above, the development proposal will meet the intentions of this control.

2.7.3 – Public Open Space

The intent of this control is to ensure the provision of well located and accessible public open spaces that meet user needs.

The development of this area of open space, in the form of Stage 5 of the Fernleigh Track will provide for recreational, aesthetic and environmental needs that will meet the community expectations and desires.

This area of public open space has been designed to provide a recreation opportunity whilst protecting the existing endemic vegetation and the encouragement of natural regrowth. The development proposal has considered the location of existing native vegetation communities as well as sites of natural and cultural value including the former Belmont Rail Platform. The development provides a link between the end of Stage 4 of the Fernleigh Track at Redhead, and Belmont which provides access to many facilities in Belmont such as the TAFE, commercial precinct, public bus routes north to Newcastle and south to Swansea as well as the Lake Macquarie foreshore areas. This link is a safe route separated from other vehicular traffic providing a direct and relatively easily traversed path of travel from Redhead / Jewells / Belmont North areas to the centre of Belmont. The facility has been designed for non-discriminatory access and use with public safety at the forefront of the design.

The proposed development is a successful attempt to integrate natural features as well as European heritage items with public open spaces to achieve a high quality open space asset.

2.7.4 – Pedestrian Networks and Places

The intent of this control is to provide quality pedestrian networks and places that are accessible and designed to meet user needs. The design of this pedestrian facility achieves a high level of user amenity, comfort, and safety. The development provides for a convenient route for pedestrians and cyclists for access to public transport, located in Belmont, shops, commercial areas, the employment areas within Belmont and significant facilities such as Belmont TAFE.

The development complies with the intent of this control.

2.7.5 Light, Glare and Reflection

This section is not relevant to this application.

2.7.6 Views

The intent of this control is to ensure that development does not unreasonably impact or intentionally obstruct views from areas of high public usage, or from existing or future private development.

The proposed development will enable the public access to a safe route and recreational facility for cyclist and pedestrians between the former Jewells (Wommara) Crossing at Railway Crescent in Belmont North and the former Belmont Railway Station at Railway Parade, Belmont.

The proposed cycleway will facilitate public enjoyment of the scenic values of the surrounding bushland and will not affect views from or to any area. The development complies with the intent of this control.

2.7.7 Signs

Signage for the proposed development will be limited to directional and information signage required for the safe use of the facility. Signage will be standard type signage that will enable easy interpretation of the signage for the use of the path.

2.7.8 Fences

Measures have been included in the design of the pathway to ensure the safety of future site users, the following fencing detail is proposed as part of the safety for future users:

- Fences will be erected along the pathway over steep embankments to prevent cyclists and pedestrians falling.
- Fences will be constructed to deny access to motor vehicles.
- 1.5m high railings will be provide for all bridges.

The fencing is appropriate for the development and promotes safety and security of the pedestrians using track.

2.7.9 Safety and Security

The intent of this control is to reduce opportunities for crime, and increase the liveability, safety and security in all areas of the City.

The development has been designed against the principles of Crime Prevention thought Environmental Design (CPTED). The construction of this stage of the track will provide a high quality extension to an existing shared cycle and pedestrian path that will attract many people to the area to legitimately use this thoroughfare. As a result of its former use as a rail corridor, the track is long, relatively direct, continuous and flat with clear sightlines. The unimpeded sightlines help to maintain good visibility and avoid "blind spots". The track provides an easy, peaceful and safe transport route separated from other vehicular traffic though a unique piece of bushland on the eastern side of Lake Macquarie.

Access on the track will be limited to cycle and pedestrian activity only. Emergency and maintenance vehicle access will be provided, except along the boardwalk section of the track, which will be used in the most ecologically sensitive areas of the track. The boardwalk areas will not be constructed to a standard capable of accommodating vehicles. Signage will be erected at the ends of the boardwalk sections to identify that vehicle access is prohibited. Locked entry gates will limit vehicle access.

As mentioned in the fencing section of this report (above), limited fencing of the track will occur to ensure the safety of pedestrians and cyclists.

The path has been designed to allow sufficient width for pedestrians and cyclists to safely share the facility. The 3m width is sufficient to permit two wheelchairs or electric scooters to pass or to permit emergency vehicle access, if required.

Stage 5 of the Fernleigh Track has been designed to minimise damage and reduce the need for undue maintenance through a simple, sturdy, high quality design. Vandalism and graffiti will be limited by using resistant finishes, where appropriate, implementing systems of quick cleaning, repair and replacement of damaged infrastructure and appropriately limiting vehicle access.

Stage 5 of the Fernleigh Track is independent of the road system, which increases the vulnerability of the users by reducing passive surveillance opportunities offered by vehicles. However, by encouraging a wide range of users, and activity, along the Fernleigh Track will improve passive surveillance opportunities and will reduce the risk of assault.

Entrapment spots, where movements are predictable, and response options limited have been avoided where possible. There are no "blind corners" or underpasses and bridges are only implemented as necessary.

As an off-road route, the proposed track is a safer route to the busy Pacific Highway for cyclists and pedestrians. As can be seen on the completed sections of the cycleway, the high cyclist and pedestrian patronage, especially on weekends, ensures a high level of casual surveillance. Given the popularity of the track overall both on weekends and during the week, casual surveillance will result in a satisfactory level of safety and security for all users of the track.

Council's Community Planner has advised that reported incidents on existing areas of the track in the year to date involve the use of projectiles to damage neighbouring fences. The use of materials that may cause this damage should be avoided.

The development will not cause adverse impact with regard to the principles of Crime Prevention Through Environmental Design.

Section 3.1 - Lake, Waterway and Coastline Development

3.1.1 – Development Adjoining the Lake and Waterways Zone

The subject land does not adjoin any land zoned 11 Lake or Waterways zone.

<u>3.1.2 – Development in or Adjoining the Coastal Zone</u>

The intent of this control is to ensure that development does not adversely impact the City's coastal lands.

The land is within the coastal zone as mapped on Council's Coastal Zone and Indicative Sensitive Coastal Locations map. The Coastal Zone is to provide for:

- Conservation of heritage;
- Coastal processes;
- Coastal protection works;
- Coastal walk;
- Public access and safety;
- Protection and enhancement of the natural environment;
- Coastline public recreation;
- Dune stabilisation and rehabilitation works;
- Coastline corridor, and
- Headland protection and rehabilitation.

The proposed development will meet the intent of the Coastal Zone. The development will provide for the continuation of the NSW Coastal Walk through this part of Lake Macquarie. In addition, the development is proposed along the

former Adamstown to Belmont rail corridor, which is an area already partially disturbed due its former use. The development provide for public access along the edge of the Coastal Zone. Providing opportunities for the public to appreciate the natural environment is more likely to result in the public taking an active role in the ownership and maintenance of the natural bushland areas.

Section 3.2 – Subdivision

Not applicable to this development.

Sections 3.3 – Urban Centre Design

Not applicable to this development.

Sections 3.4 – Housing, Building Siting, Form and Design

Not applicable to this development.

Sections 3.5 – Housing – Specific Housing Types

Not applicable to this development.

Section 3.6 – Industrial, Bulky Goods and Utility Installation Development

Not applicable to this development.

Sections 3.7 – Specific Land Uses

Not applicable to this development.

Sections 4 – Area Plans

There are no area plans applicable to this development.

79C(1)(a)(iiia) any planning agreement that has been entered into or any draft planning agreement that the developer has offered to enter into

A planning agreement or draft planning agreement has not be offered to be entered into.

79C(1)(a)(iv) any matters prescribed by the regulations

The Regulation 2000 provides:

(1) For the purposes of section 79C (1)(a)(iv) of the Act, the following matters are prescribed as matters to be taken into consideration by a consent authority in determining a development application:

- (a) in the case of a development application for the carrying out of development:
 - *(i) in a local government area referred to in the Table to this clause, and*
 - (ii) on land to which the Government Coastal Policy applies,

the provisions of that Policy,

(b) in the case of a development application for the demolition of a building, the provisions of AS 2601.

The Government Coastal Policy does not apply. The application is not for the demolition of a building.

79C(1)(b) the likely impacts of the development

The following matters were considered and, where applicable, have been addressed elsewhere in this report.

Context & Setting Access, transport & traffic Public domain Utilities	Waste Energy Noise & vibration Natural hazards
Heritage	Technological hazards
Other land resources Water	Safety, security & crime prevention Social impact on the locality
Soils	Economic impact on the locality
Air & microclimate	Site design & internal design
Flora & fauna	Construction

79C(1)(c) the suitability of the site for development

Does the proposal fit the locality?

The proposal is suited to the locality, subject to the imposition of appropriate conditions.

Are the site attributes conducive to development?

The site attributes are conducive to development.

79C(1)(d) any submissions made in accordance with this Act or the Regulations?

Public submissions:

One submission was received from the public.

The submission received was from Belmont Wetlands State Park Trust on 26 May 2010.

The State Park Trust has advised that the major community issue currently frustrating the Trust's good management practice is unauthorised motor vehicle access to their land holding and the damage to native vegetation within the park and to community volunteers' vegetative rehabilitation projects. The submission requests that Council consider issues in relation to the State Park boundary security, and conservation, and protection of Endangered Ecological Communities that occur beside the shared pathway and within the jointly managed lands.

In response to the submission, the following is provided:

Impact on the Endangered Ecological Community

The Endangered Ecological Communities (EEC) of Freshwater Wetlands and Swamp Mahogany have been identified in the Environmental Impact Statement. The erosion and sediment control plans show "No Go" zones to minimise disturbance to the EECs. Protective measures also include flagging off with barrier mesh fencing and the erection of silt protection fencing. Trees that are to be removed under any consent for the development are to be marked on-site by tape. A condition of consent is proposed regarding tree retention and protection that will ensure the protection of the EEC.

The submission requests that the consent require weed removal from the EEC, however, this is beyond the scope of the DA and would require additional works beyond the boundaries of the development. A Landcare group currently work within this area, weeding, maintaining, and replenishing the native vegetation.

Council's Development Planner – Flora and Fauna has reviewed the development proposal and supportive documentation and advised that effort has been made to minimise impact to native vegetation and hydrological flows along the proposed cycleway alignment by:

- locating the proposed cycleway along an existing disturbed easement;
- Integrating sections of boardwalk to minimise impact to tree root systems; and
- providing clear indication of trees to be retained / trees to be removed on the Tree Removal / Tree Retention Plan.

Council's Development Planner – Flora and Fauna has also advised that, provided the development is conditioned to protect existing vegetation, then no objection to the development is raised with regard flora and fauna. This requirement adopts some of the recommendations contained in the submission, in relation to the protection of existing vegetation.

Park Boundary Security

An important part of this project is to limit access for all motorised vehicles. The provision of extensive barrier type fencing, post and cable fencing, maintenance gates and kissing gates is included in the proposal. The use of the barrier type fencing is in accordance with Austroads guidelines for use of the track as a cycleway, this requirement is for the safety of cyclists and pedestrians using the track. The purpose of deflection rails is to deny access directly onto the track from adjoining roadways by motor vehicles. All formal access to the track will be through the locked maintenance access gates only. Access will only be

available through regulated access points adjacent to the former John Darling Colliery turnout, the Merleview fire trail, and the George fire trail.

Post and cable fencing is proposed to be installed in many locations to clock off all existing access points with evidence of vehicle traffic. This will have the dual effect of denying vehicle access not only onto the track but also from the track into the State Park. Approximately 410 metres of post and cable fencing is proposed along different sections of the track. As part of the Stage 4 construction works, approximately 160 metres of post and cable fencing is proposed to deny vehicle access from Railway Crescent, Kalaroo Road and both ends of the platform area. This fencing will prohibit access from the Council owned Track into the State Park. A further 50m of post and cable fencing will be provided within Stage 5 to deny access from the State Park onto the Fernleigh Track.

Kissing Gate assemblies will be provided on both sides of Fernleigh Track at the John Darling, Merleview, and George fire trail crossings. As these installations will be in association with a maintenance gate, the clearance from the track will need to be greater than two metres for the safety of all users, with the suggested minimum clearance being five metres. The lengths of post and cable fencing necessary to successfully prevent vehicle access are not limited to 40 metres. Each access will have a specifically designed length of post and cable fencing depending on the site conditions and constraints.

Maintenance vehicle access gates will be installed on both sides of the Fernleigh Track at the John Darling, the Merleview, and the George fire trail crossings. At the John Darling fire trail crossing (CH2810) there is no current crossing however the proposal is to create the crossing and to therefore deny vehicle access to and from the eastern side of Fernleigh Track at CH2855 and CH 2940 and at CH2750 on the western side of the Track.

With regard to access from the eastern maintenance road within the State Park (at approximate CH3660 and CH3770) the alignment of the proposed cycleway has been amended to follow the original alignment of the former railroad, and remain within the Fernleigh Track corridor. The existing access points will be closed by the installation of post and cable fencing.

Presently a level of illegal access exists. However, the proposed development is unlikely to make the illegal access worse than presently exists. The development, being a cycleway and pedestrian pathway, will provide a positive contribution to the area in the form of casual surveillance of an area that is presently hidden from the public eye. The prolific use of the already constructed parts of the Fernleigh Track leads Council officers to believe that the use of this area of the Track will be relatively high, thus providing good casual surveillance of the area in daylight hours. The construction of exclusion fencing along the length of the track is unlikely to stop unauthorised access into other areas of the Belmont Wetland State Park.

In summary, it is not proposed to create a fully fenced "lockout" facility. The following lengths of fencing are proposed:

- Full barrier fencing 566 metres;
- Boardwalk fencing 467 metres, and

• Post and cable fencing – 410 metres.

Gate installations will include six maintenance vehicle gates and seven kissing gates. The purpose of the pedestrian path / cycleway is to exclude vehicular access, as such additional post and cable fencing will be installed should the need arise to control motor vehicle access.

A condition of consent is proposed which requires the installation of signs that limit parking to vehicles "under 6m in length" and within the designated parking bays. Overflow parking is to be deleted from the Construction Certificate plans. Illegal parking can be monitored and supplementary signage can be provide as required. It should be noted that the construction of the parking areas has already been approved in Stage 4 of the development.

Submissions from public authorities:

As required by the EPA Regulation 2000, relevant government departments were notified, being:

Newcastle City Council;

EnergyAustralia;

Roads and Traffic Authority;

Hunter Water Corporation;

Rural Fire Service;

Land and Property Management; and

Industry and Investment NSW.

At the time of writing, Newcastle City Council, Hunter Water Corporation, Land and Property Information and Roads and Traffic Authority had not responded to the application.

EnergyAustralia advised of no objections on 12 May 2010.

The NSW Rural Fire Service advised of no objections on 19 May 2010.

Industry and Investment NSW advised on 12 May 2010 that their response was a coordinated response from the Mineral Resources and Fisheries divisions of the former Department of Primary Industries, now part of Industry and Investment NSW (I&I NSW). I&I NSW advised that the matters that need to be addressed by the proponent include sediment erosion control and stormwater management. They also advised that the potential for reconstruction of some minor waterway crossings also needs to be assessed which may require a permit to dredge and reclaim. At this stage, the development proposal will not require a permit.

An advertisement was placed in the Herald (Newcastle) on two occasions, and signs were placed on the site at the beginning and end of the former railway corridor where the corridor is in closer proximity to surrounding residences. The exhibition period was 26 April 2010 to 31 May 2010.

Adjoining and adjacent neighbours were notified of the proposal. One submission was received. The submission does not object to the development but raises issues that should be considered as part of the assessment process. The details of this submission are addressed at section 79C(1)(d) of this report.

79C(1)(e) the public interest

Approval of this development proposal is considered to be in the public interest. Wide community notification was undertaken as part of the advertising process as well as the notification of the proposal in the Newcastle Herald on two occasions during the advertising period. Only one submission has been received concerning the proposal. The submission clearly states that the "BWSP Trust is very willing to work with LMCC on this project and agrees with the general thrust of the DA works proposed. The submission relates to design detail of the proposal with an "intention of gaining better outcomes for the community and the State Park with regard to this development."

The detailed EIS has been assessed by Council's Development Planners and conclusions reached as to the impact of the development. With appropriate construction techniques and the continuing works to use of the former Adamstown to Belmont rail corridor the impacts of the development will be minimised. In this regard, the development proposes the use of a boardwalk type construction in the most environmentally sensitive area near the SEPP 14 wetland and EEC.

The provision of a coastal walk and cycleway is encouraged by numerous strategic documents such as the Lower Hunter Regional Strategy, Newcastle Lake Macquarie Bike Plan 1996, Lake Macquarie City Council's Lifestyle 2020 document, and the NSW Coastline Cycleway.

If the development is undertaken in accordance with the plans submitted it is likely there will be minimal environmental impact. The result will be positive for the community and the Newcastle and Lake Macquarie Local Government Areas.

Conclusion:

Based on the above assessment it is concluded that the construction of a Road – Cycleway being Stage 5 of the Fernleigh Track at 8A Cowlishaw Street Redhead and 1A and 2 Railway Parade, Belmont will result in a minimal impact on the environment. Subject to conditions of consent in relation to the construction methods of the pedestrian pathway / cycleway the proposal is supported.

Recommendation:

That the application be approved, subject to the conditions contained in Appendix A to this report.

Elizabeth Lambert Acting Principal Development Planner Lake Macquarie City Council

I have reviewed the above planning assessment report and concur with the recommendation.

John Andrews Chief Development Planner Lake Macquarie City Council

Appendix A: Conditions

Conditions of Consent

(Approved subject to the conditions specified in this notice and in accordance with the stamped approved plans.)

Reason For The Imposition Of Conditions

The reason for the imposition of the following conditions is to ensure, to Council's satisfaction, the objects of the Environmental Planning and Assessment Act 1979 (as amended) are achieved:

- (a) To encourage:
 - The proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forest, minerals, water, cities, towns, and villages for the purpose of promoting the social and economic welfare of the community and a better environment,
 - (ii) The promotion and co-ordination of the orderly and economic use of development of land,
 - (iii) The protection, provision, and co-ordination of communication and utility services,
 - (iv) The provision of land for public purposes,
 - (v) The provision and co-ordination of community services and facilities, and
 - (vi) The protection of the environment, including the protection and conservation of native animals and plants including threatened species, populations, and ecological communities and their habitats, and
 - (vii) Ecologically Sustainable Development, and
 - (viii) The provision and maintenance of affordable housing.
- (b) To promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and
- (c) To provide increased opportunity for public involvement and participation in environmental planning and assessment.

1. Prescribed Conditions

(a) The work must be carried out in accordance with the requirements of the Building Code of Australia.

- (b) In the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, that such a contract of insurance is in force before any building work authorised to be carried out by the consent commences.
- (c) A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:

(i)	showing the name, address and telephone number of the Principal Certifying Authority for the work, and
(ii)	showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
(iii)	stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

(d) Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the council) has given the Council written notice of the following information:

(i)	in the case of work for which a principal contractor is required to be appointed:						
	a.	a. the name and licence number of the principal contractor, and					
	b.	the name of the insurer by which the work is insured under Part 6 of that Act,					
(ii)	in th	in the case of work to be done by an owner-builder:					
	a. the name of the owner-builder, and						
		if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.					

If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under (d) becomes out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council) has given the Council written notice of the updated information.

(e)

 (i) For the purposes of section 80A (11) of the Act, it is a prescribed condition of development consent that if the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the development consent must, at the person's own expense: a protect and support the adjoining premises from possible 					
a. protect and support the adjoining pre		protect and support the adjoining premises from possible			

		damage from the excavation, and				
	b.	where necessary, underpin the adjoining premises to prevent any such damage.				
(ii)	 The condition referred to in (e) (1) does not apply if the person has the benefit of the development consent owns the adjoining land of the owner of the adjoining land has given consent in writing to the condition not applying. 					

2. Approved Documentation

This development consent incorporates plans/and or documents referenced and stamped:

- (a) Development Consent No. 2010/582
- (b) Plans Reference:

Design Drawings; prepared by: Lake Macquarie City Council; Project Name – Fernleigh Track Stage 5

Drawing Title	Drawing No.	Sheet No.	Version	Date	
Overall Plan	2620-02	1 of 21	03	18 June 2010	
Detail Plan and Longitudinal Section CH2396.766 to CH2720.000	2620-02	2 of 21	03	18 June 2010	
Detail Plan and Longitudinal Section CH2720.000 to CH3060.000	2620-02	3 of 21	03	18 June 2010	
Detail Plan and Longitudinal Section CH3060.00 to CH3400.000	2620-02	4 of 21	03	18 June 2010	
Detail Plan and Longitudinal Section CH3400.000 to CH3740.000	2620-02	5 of 21	03	18 June 2010	
Detail Plan and Longitudinal Section CH3740.000 to CH4080.000	2620-02	6 of 21	03	18 June 2010	
Detail Plan and	2620-02	7 of 21	03	18 June	

Longitudinal Section CH4080.000 to CH4420.000				2010
Detail Plan and Longitudinal Section CH4420.000 to CH4760.000	2620-02	8 of 21	03	18 June 2010
Detail Plan and Longitudinal Section CH4760.000 to CH4760.000	2620-02	8 of 21	03	18 June 2010
Detail Plan and Longitudinal Section CH4760.000 to CH5100.000	2620-02	9 of 21	03	18 June 2010
Detail Plan and Longitudinal Section CH5100.000 to CH5440.000	2620-02	10 of 21	03	18 June 2010
Detail Plan and Longitudinal Section CH5440.000 to CH5745.823	2620-02	11 of 21	03	18 June 2010
Fencing Details	2620-02	12 of 21	03	18 June 2010
Kissing Gate and Deflection Rail Details	2620-02	13 of 21	03	18 June 2010
Seat Details	2620-02	14 of 21	03	18 June 2010
Setout Plan CH2396.766 to CH3060.000	2620-02	15 of 21	03	18 June 2010
Setout Plan CH3060.000 to CH3740.000	2620-02	16 of 21	03	18 June 2010
Setout Plan CH3740.000 to CH4420.000	2620-02	17 of 21	03	18 June 2010
Setout Plan CH4420.000 to CH5100.000	2620-02	18 of 21	03	18 June 2010
Setout Plan CH5100.000 to CH574.823	2620-02	19 of 21	03	18 June 2010
Erosion and Sediment Control Plan	2620-02	20 of 21	03	18 June 2010
Erosion and Sediment	2620-02	21 of 21	03	18 June
Control Notes and		2010		
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Locality Plan				

Landscape Drawings; prepared by: Lake Macquarie City Council; Project Name – Fernleigh Track Stage 5				
Drawing Title	Drawing No.	Sheet No.	Version	Date
Analysis	FTSTG5L101V2	1 of 14	2	15 June 2010
Belmont Platform Plan	FTSTG5L102V2	2 of 14	2	15 June 2010
Soft Works Plan	FTSTG5L103V2	3 of 14	2	15 June 2010
Belmont Platform South Plan	FTSTG5L104V2	4 of 14	2	15 June 2010
Belmont Platform South Sections and Elevations	FTSTG5L105V2	5 of 14	2	15 June 2010
Belmont Platform Plan North	FTSTG5L106V2	6 of 14	2	15 June 2010
Details	FTSTG5L107V2	7 of 14	2	15 June 2010
Details	FTSTG5L108V2	8 of 14	2	15 June 2010
Details	FTSTG5L109V2	9 of 14	2	15 June 2010
Belmont Platform Fence Details	FTSTG5L110V2	10 of 14	2	15 June 2010
Softscape Details	FTSTG5L111V2	11 of 14	2	15 June 2010
Detail Plan	FTSTG5L112V2	12 of 14	2	15 June 2010
Conserved Western Section of Existing Platform Facing	FTSTG5L113V2	13 of 14	2	15 June 2010
Conserved Western Section of Existing Platform Facing &	FTSTG5L114V2	14 of 14	2	15 June 2010

Feature Concrete		
Wall Detail		

Tree Removal / Retention Plan; prepared by: Lake Macquarie City Council; Project Name: Fernleigh Track Stage 5				
Drawing Title	Drawing No.	Sheet No.	Version	Date
Tree Removal / Retention Plan – Overall Plan	2620-03	1 of 7	01	14 April 2010
Tree Removal / Retention Plan – CH3740.000 to CH4080.000	2620-03	2 of 7	01	14 April 2010
Tree Removal / Retention Plan – CH4080.000 to 4420.000	2620-03	3 of 7	01	14 April 2010
Tree Removal / Retention Plan – CH4420.000 to CH4760.000	2620-03	4 of 7	01	14 April 2010
Tree Removal / Retention Plan – CH4760.000 to CH5100.000	2620-03	5 of 7	01	14 April 2010
Tree Removal / Retention Plan – CH5100.000 to CH5440.000	2620-03	6 of 7	01	14 April 2010
Tree Removal / Retention Plan – CH5440.000 to CH5745.823	2620-03	7 of 7	01	14 April 2010

Boardwalk and Handrail Plans; prepared by: GHD; Project Name –
Fernleigh Track Stage 5 BoardwalkDrawing TitleDrawing No.RevisionDate

Drawing little	Drawing No.	Revision	Date
Construction Notes	22-14942-S001	В	8 April 2010
Construction Notes	22-14942-S002	А	8 April 2010

Footing Layout – Sheet 1	22-14942-S005	В	8 April 2010
Footing Layout – Sheet 2	22-14942-S006	В	8 April 2010
Footing Details	22-14942-S010	В	8 April 2010
Platform Plan and Section Details	22-14942-S011	A	8 April 2010
Handrail Details	22-14942-S015	В	8 April 2010

(c) Document Reference:

- Arborist Report by Treeology Pty Ltd; reference number 10-008; dated 9 March 2010
- Acid Sulfate Soils Investigation and Management Plan by RCA Australia; reference 7468-601/1; dated November 2009
- Conservation Management Polices of the Statement of Heritage Impact, Fernleigh Track Stage 4 & 5 by High Ground Consulting; dated 1 October 2009

Details of the development shown in the approved plans and documents referenced are altered in the manner indicated by:

- (i) Any amendments in RED on the approved plans or documents;
- (ii) Any notes, markings, or stamps on approved plans or documents:
- (iii) Any conditions contained in this consent.

3. Construction Certificate

Prior to the commencement of work for the construction of a building or structure, it will be necessary to obtain a Construction Certificate.

4. Commencement of the Use of the Land

Commencement of the use of the land identified in this consent for the purposes approved by this consent, shall not commence until all conditions of this consent have been complied with and an interim Occupation Certificate has been issued.

5. Occupation Certificate

Prior to the occupation and/or use of a new or altered building, an Occupation Certificate must be issued by the accredited certifier.

6. Retention of Trees and Native Vegetation

All trees and native vegetation on the site shall be retained and protected unless it has been identified for removal on the *Tree Removal / Retention Plan: Railway Crescent Belmont North To Railway Parade Belmont: Plan No. 2620 – 03 (LMCC 14/04/10).*

All reasonable measures shall be undertaken to protect all other native vegetation on the site and on adjoining lands from damage during construction. Such measures shall include but not be limited to:

- following recommendations of the *Arborist Report (Treeology 9th March 2010)*;
- marking all trees to be removed with flagging tape or the equivalent prior to construction;
- installing exclusion fencing (eg; No Go tape, helicopter tape or orange mesh) around all other trees and vegetation that adjoin the construction area and that are to be retained, to minimise damage to this vegetation. Exclusion fencing is to be installed prior to commencement of works and maintained in good working order for the duration of works;
- prohibiting compaction and the placement of fill within 5 metres of trees and native vegetation that are to be retained;
- keeping all vehicles, construction materials and refuse within areas approved for buildings, structures, access ways and car parks;
- limiting the number of access points;
- salvaging useable trees and shrubs, which are felled for re-use, either in log form, or as woodchip mulch for erosion control and/or site rehabilitation. Non-salvageable material such as roots and stumps may only be disposed of at an approved site;
- notifying all contractors, sub-contractors, and personnel of vegetation protection requirements of this condition.

7. Requirements of the Department of Planning

The Director General of the Department of Planning issued his concurrence in relation to Clause 7(1) of State Environmental Planning Policy 14 – Coastal Wetlands, subject to the following conditions:

- Further research and measurement is to be carried out on local flood characteristics prior to and during construction.
- Adequate drainage is to be provided to ensure existing standing water levels and drainage times are maintained in the northern area of the swamp
- Any sections that are identified as prone to flooding should be marked with warning signs.

8. Amendment to Plans

The current design of the shared path at the Gen / Ernest Street intersection leads cyclists and pedestrians into the intersection. The plans shall be amended such that the shared path must lead cyclists to Railway Parade or Alick Street and not into the intersection.

9. Seating Along the Pathway

Seating compliant with AS1428.2 is to be provided at intervals no greater than 500 metres along the pathway.

10. Heritage Requirements - Site Induction

As part of the site induction and prior to commencement of works, the applicant, all contractors, sub-contractors and employees are to be notified of the provisions of the Heritage Act 1977 (NSW).

The site induction is to clearly identify significant archaeological features requiring protection as detailed in the Conservation Management Polices of the Statement of Heritage Impact, Fernleigh Track Stage 4 & 5, High Ground Consulting, dated 1 October 2009. They include but are not limited to:

- Jewells (Woomera) Station eastern and western concrete walls, and concrete pad
- Belmont Platform identified archaeological features, including;
 - Floor and brick wall of former station building;
 - Floor and frame of the former toilet block;
 - Upright rail posts;
 - Identified 5.5 m of platform face as highlighted on plans, and
 - Platform face timbers to be reused for interpretation.

Storage requirements for objects to be retained for interpretation and made safe are to be identified.

11. Excavation – Historical Relics

Should any historical relics be discovered then all excavations or disturbance to the area are to stop immediately and the Heritage Council of NSW shall be informed in accordance with Section 146 of the Heritage Act, 1977.

Depending on the possible significance of the relics, an archaeological assessment and an excavation permit under the Heritage Act, 1977 may

be required before any further work can be recommenced in that area of the site.

12. Excavation – Aboriginal Relics

Should any Aboriginal relics be discovered then all excavations or disturbance to the area shall cease immediately and the NSW Department of Environment, Climate Change and Water and a representative of Bahtahbah Aboriginal Land Council shall be informed in accordance with Section 91 of the National Parks and Wildlife Act 1974.

13. Skeletal Remains

Should any skeletal remains be uncovered, work is to stop in the vicinity immediately and the NSW Coroner's Office and NSW Police are to be contacted.. If skeletal remains are deemed to be of Aboriginal origin, NSW Department of Environment, Climate Change and Water and a representative of Bahtahbah Aboriginal Land Council shall be informed.

14. Heritage - Conservation / Restoration/ Reconstruction Requirements

Any works impacting on significant archaeological features are to be in line with the conservation policies set out in the Statement of Heritage Impact, Fernleigh Track Stage 4 & 5 by High Ground Consulting; dated 1 October 2009.

15. Heritage Requirements - Protective Fencing And Barriers

In providing safety and security measures for users of the cycleway protective fencing may be installed in a form sympathetic to the heritage character of the Belmont Railway (Heritage Item Number - RT-04), where deemed appropriate along the route of the cycleway within Stage 4 & 5. Any gates are to be the pattern of gates already installed in the Stage 1, 2, 3 and 4.

16. Wommara / Jewels Platform

Protection measures within the gabion structure in the Wommara Platform treatment are to be implemented to avoid future maintenance difficulties or rubbish control.

17. Contaminated Land Investigation

Should any contamination become evident either prior to commencement of works or during construction works it will be necessary for the applicant to provide a contamination report dealing with any contamination of the site.

The report is to be carried out by a recognised contaminated land consultant, and shall be in accordance with the NSW Department of Environment, Climate Change and Water (DECCW) Guidelines.

The report shall:

- identify types of contamination;
- outline the extent of contamination, and
- detail proposed remediation measures of the site

The report and its recommendation shall be submitted to council for consideration and approval prior to further working being undertaken.

18. Table Drain Treatments

Any table drains are to be stabilised using native plants. In areas where erosion is of more concern, rock lining or a combination of rock lining and planting is to be utilised. Any re-shaping is to achieve a shallow, flat profile. Deep v-shaped drains are not to be utilised. Bitumen spray is not to be utilised in these areas. This will ensure that water velocities are not increased and will reduce the incidence of hard (bitumen) surfaces and soft surfaces (such as creek banks and natural drainage channels) meeting, as this is typically where erosion can occur.

19. Topsoil

Topsoil shall only be stripped from approved areas and shall be stockpiled for re-use during site rehabilitation and landscaping.

20. Construction Site Safety Fencing

Construction site safety fencing must be provided around the construction area to prevent unauthorised access to the construction site.

21. Excavation & Retaining

Wherever the soil conditions so require, a retaining wall or other approved methods of preventing movement of the soil shall be provided and adequate provision made for drainage.

Prior to construction of any retaining wall not shown on the approved plans, that exceeds 600mm in height and/or the retaining wall does not comply with the provisions for exempt development of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*, it will be necessary to obtain development consent, a

separate construction certificate and provide plans, specifications and structural engineers details.

No additional excavation/fill is to occur outside the area as shown on the approved plans, except with prior development consent or where the excavation/fill complies with the provisions for exempt development of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

No fill or retaining walls shall be located within any drainage easement located upon the subject property.

Retaining walls and associated drainage works are to be located wholly within the subject property boundaries and to be connected to the existing stormwater system on the subject property.

22. Supporting of Adjoining Building

All excavations and backfilling shall be executed in a safe and workmanlike manner and in accordance with appropriate professional standards.

All excavations shall be properly guarded and protected to prevent them from being dangerous.

If an excavation extends below the footings of a building on an adjoining allotment of land, the person causing the excavation to be made shall, at their own expense, comply with the requirements of Part 3.1.1.3 Building Code of Australia; and

(a) preserve and protect such building from damage; and

(b) if necessary underpin and support such building in an approved manner.

The person causing the excavation to be made shall, at least seven days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of their intention to do so to the owner of the adjoining allotment of land and shall at the same time furnish to such owner particulars of the work proposed to be done.

23. Building Waste

Suitable provision for the containment of building waste materials generated by the building process, shall be provided within the boundaries of the building site prior to any construction work being commenced above natural or excavated ground level, as follows:-

- (a) Such containment measures are to be either by means of a screened area of silt stop fabric or shade cloth, having dimensions of 2.4 x 2.4 x 1.2 metres high OR equivalent size waste disposal bin;
- (b) The provision of a suitable enclosure or bin shall be maintained for the term of the construction to the completion of the project;

(c) The enclosure or bin shall be regularly cleaned to ensure proper containment of the building wastes generated on the construction site.

Appropriate provision is to be made to prevent wind blown rubbish escaping from the containment.

24. Stockpiles of Topsoil

Stockpiles of topsoil, sand, aggregate, spoil or other material capable of being moved by running water shall be stored clear of any drainage line or easement, natural watercourse, footpath, kerb or road surface.

25. Runoff Detention And Sediment Interception Measures

Prior to commencement of works, runoff detention and sediment interception measures shall be applied to the land to reduce flow velocities and to prevent topsoil, sand, aggregate, road base, spoil or other sediment escaping from the site or entering any downstream drainage easements or natural watercourses.

26. Disposal of Excess Fill

Any excess fill arising from the proposed development shall be deposited at a Council approved site. Notification and prior arrangement to this Council approved site may be required prior to any fill being deposited. The details of the composition and volume of the fill and the site of disposal are to be forwarded to Council prior to issue of a Construction Certificate.

27. Stormwater Disposal

The applicant shall include stormwater plans and supporting calculations for the development with the Construction Certificate application in accordance with the following:-

 Stormwater shall be disposed of through a piped system designed in accordance with Australian Standard AS 3500 by a suitably qualified professional. Qualifications shall be in accordance with Part DQS.06 of Council's Engineering Guidelines.

All drainage works shall be carried out in accordance with the approved plans. A **Works As Executed Plan** that shows that the works comply with the Construction Certificate Drainage Plans shall be provided to the Principal Certifying Authority before the issue of any **Occupation Certificate**.

The Works as Executed Plan shall be endorsed by a Registered Surveyor or the designing Engineer.

28. Parking Areas

All parking areas shall be constructed, sealed and drained in accordance with the standards nominated in Lake Macquarie City Council's Development Control Plan No. 1 and the associated Engineering Guidelines.

29. Parking Signs

Signs that limit parking to vehicles "under 6m in length" and require parking within the designated parking bays shall be installed.

A "Give-Way" sign (R1-2A) shall be installed where the shared path ends and connects with the street.

The "End Shared Path" signage (R8-2 with R7-4) shall be located where the path joins the street. Persons above 12 years of age are prohibited from riding on the path until the path becomes a signposted "Shared Path".

Overflow parking is to be deleted from the development proposal and Construction Certificate plans.

30. Erosion Controls

The Applicant shall submit for approval with the Construction Certificate, a Soil and Water Management Plan for the development in accordance with Council's Development Control Plan No. 1 – and Landcom's – Managing Urban Stormwater documents (2004).

No more than 2.5 hectares of the site shall be exposed to erosion at any time.

The applicant shall arrange for a detailed record of the erosion and sediment controls on the site to be maintained during construction works. The record shall be updated on a daily basis and shall contain details on the conditions of the controls and all maintenance and cleaning undertaken.

The record must be available for inspection by the Principal Certifying Authority during normal working hours.

Plans and calculations for such erosion controls shall be submitted prior to the issue of a Construction Certificate and the works shall be completed as part of the initial construction work in the first stage of the development. Minor additional works may be approved by the Principal Certifying Authority during construction works.

31. Noise Control

All possible steps shall be taken to silence construction equipment and the operating noise level of plant and equipment shall not give rise to

"offensive noise" as defined by the Protection of the Environment Operations Act 1997.

The operating noise level of machinery, plant and equipment during construction site operations shall comply with Chapter 171 of the NSW EPA's Noise Control Manual.

Construction operations shall be confined between the hours of 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm Saturday. If construction operations are inaudible within occupied residential properties then the work period may be extended on Saturdays to 7.00am to 1.00pm. No construction work shall take place on Sundays or Public Holidays.

Should it be necessary to use mechanical rock breakers or conduct blasting then these operations shall be confined between the hours of 9.00am and 3.30pm Monday to Friday (excluding any Public Holiday).

Noise Level Restrictions

(i) Construction period of 4 weeks and under:-

The L10 level measured over a period of not less than 15 minutes when the construction site is in operation must not exceed the background level by more than 20dB(A).

(ii) Construction period greater than 4 weeks:-

The L10 level measured over a period of not less than 15 minutes when the construction site is in operation must not exceed the background level by more than 10dB(A).

32. Roads And Drainage Construction Works

Roadways and Drainage Works Standards

The Applicant shall arrange for all relevant works to be designed and constructed in accordance with the following publications (as amended or updated), as applicable:-

- a) Australian Rainfall and Runoff, 1987.
- b) AUSTROADS Guide To Traffic Engineering Practice.
- c) DCP 1 (Volumes 1 and 2) and supporting guidelines.
- d) Roads and Traffic Authority Road Design Guide.
- e) Roads and Traffic Authority Interim Guide To Signs and Markings.
- f) Managing Urban Stormwater documents (2004).by Landcom.
- g) The Constructed Wetlands Manual Department of Land and Water Conservation, 1998.
- h) Subdivision Code

Where any inconsistency exists between these documents the Applicant shall verify in writing with Council, the relevant standard to be adopted.

Details Required Prior to Commencement

Construction works in accordance with this development consent shall not commence until:-

- (a) detailed engineering plans and specifications (including a Design Certification Report and Checklists in accordance with the Lake Macquarie City Council Engineering Guidelines) relating to the work have been endorsed with a **Construction Certificate** by :-
 - (i) Council, or
 - (ii) an appropriately Accredited certifier accredited in accordance with the Building Professionals Board Accreditation Scheme, and

An Application For A Construction Certificate Can Only Be Made To Lake Macquarie City Council For All Works On Existing Public Roads (In Accordance With Council's Authority Under The Roads Act).

- (b) the person having the benefit of the development consent:-
 - (i) has appointed a Principal Certifying Authority, and
 - (ii) has notified the consent authority and the Council (if the Council is not the consent authority) of the appointment, and
- (c) the person having the benefit of the development consent has given at least two (2) days notice to Council of the intention to commence works.

Traffic Control Standards

For the duration of work being carried out as part of this development, the Applicant shall ensure that traffic control is undertaken in accordance with the requirements of Australian Standards AS 1742 - Manual Uniform Traffic Control Services – Parts 1, 2 and 3.

Linemarking and Signposting

All regulatory linemarking and sign posting on Public roads shall be submitted to Council's Traffic Facilities & Road Safety Committee. The works shall not commence until approved by the Committee.

Pavement Standards

Residential road pavements shall be designed in accordance with "A Guide To The Design Of New Pavements For Light Traffic" -AUSTROADS 1998. Main and Industrial road pavements are to be designed in accordance with "Pavement Design, A Guide to the Structural Design of Road Pavements" - AUSTROADS 1992. Designs for road pavements shall be submitted to and approved by the Council or a Private Certifier prior to road pavements being constructed. Where work is to be undertaken within a classified Main Road the pavement design shall also be submitted to the Roads and Traffic Authority for it's approval prior to the commencement of works.

Notification to Neighbours

Written notification shall be given by the Applicant to landowners and residents who live adjacent to the proposed development or who may be affected by the proposed works. The notification should include the expected date of commencement of works and a brief description of the works.

Haulage Routes

The Applicant shall submit to Council, in writing, details of the proposed haulage routes to be used during construction works. These details must be submitted a minimum of seven days before the commencement of haulage operations. No haulage operations shall take place prior to the approval of the routes by Council. The haulage routes shall not be varied without the approval of Council.

The Applicant shall maintain and restore the haulage route roads, as near as possible, to their original condition.

Fix Damage Caused by Construction Work

The Applicant shall make good any damage or injury caused to a public road or associated structures including drains and kerb and gutter, caused as a consequence of the works.

Notice of Commencement of Works

Construction works shall not commence until a meeting between the contractor and a representative of the Principal Certifying Authority (PCA) has taken place on site.

The PCA may require up to seven days notice in writing prior to such meeting taking place.

The notice shall also include the names of the contractor undertaking construction and the developer's supervising officer.

Works as Executed Plan

An electronic copy of the Works as Executed Plans, certified by the Consulting Civil Engineer supervising the works or the Registered Surveyor in charge and certified by the Principal Certifying Authority, shall be supplied to the Council. Where applicable a Registered Surveyor's Certificate certifying that all pipes have been laid within the easements shown on the Final Plan of Subdivision shall also be submitted. The Works as Executed Plan shall, in addition to construction details, show limits and depths of filling, locations of service conduits and street names.

Note that a works as executed plan plotted on film will only be accepted where the original engineering design was hand drawn and not drafted using CAD software.

Survey Control Marks Interference

The Applicant shall submit a statement from a Registered Surveyor verifying that the works did not interfere with any survey control marks OR the Applicant shall submit verification that the Survey Control Branch of the Department of Lands has been advised of any marks which will be destroyed and an undertaking that the requirements of the Survey Control Branch will be complied with.

Compliance Certificate for Works

The Applicant shall obtain and submit a **Compliance Certificate**/s to certify that all construction works and associated development have been constructed in accordance with this Development Consent, the **Construction Certificate** and all other standards specified in this consent.

33. Acid Sulphate

Works shall be carried out in accordance with the recommendations of the Acid Sulphate Soils Investigation and Management Plan by RCA Australia Ref 7468-601/1 November 2009.