JOINT REGIONAL PLANNING PANEL
(Hunter Central Coast Region)

JRPP No	**2013HCC014**
DA Number	**DA/542/2013**
Local Government Area	**Wyong Shire Council**
Proposed Development	**Remediation of Former Landfill**
Street Address	**No 70 - 100 McPherson Road, Mardi**
Applicant/Owner	**Wyong Shire Council**
Number of Submissions	**None**
Recommendation	**Approval with Conditions**
Report by	**Jenny Webb, Senior Development Planner**

Assessment Report and Recommendation

WYONG SHIRE COUNCIL

Development and Building
Department

Landfill Remediation at Mardi

DA No 542/2013 Author: Jenny Webb

SUMMARY

A development application has been received for the remediation of a former landfill site at Mardi. The application has been examined having regard to the matters for consideration detailed in section 79C of the Environmental Planning and Assessment Act (EP&A Act) and other statutory requirements with the issues requiring attention and consideration being addressed in the report.

Applicant	Wyong Shire Council
Owner	Wyong Shire Council
Application No	DA/542/2013
Description of Land	No 70 – 100 McPherson Road, including Lot 1and 2 DP 449738, Lot 361 DP 620853, Lot 1 DP 817815 and unformed road
Proposed Development	Remediation (capping) of former landfill site and on-going use as a recreation area
Site Area	Approx. 20 hectares
Zoning	1(c) Non Urban Constrained Land 6(a) Open Space and Recreation 7(a) Conservation Zone
Existing Use	Former landfill
Employment Generation	No
Estimated Value	$8.9 million

Referral to Hunter Central Coast Joint Regional Planning Panel

The proposal is referred to the Hunter Central Coast Joint Regional Planning Panel (JRPP) for determination pursuant to Part 4 of State Environmental Planning Policy (State and Regional Development) (SEPP) 2011 and Schedule 4A, Section 4 of the EP& A Act, 1979. In this regard, Wyong Shire Council (WSC) is the owner, applicant and is proposing to carry out the work, which has a capital investment value (CIV) of over $5 million.

RECOMMENDATION

1 That the Joint Regional Planning Panel grant consent to DA/542/2013, subject to the conditions contained in Appendix A.

2 That a copy of the determination be forwarded to the NSW Office of Water, the NSW Roads and Maritime Services and the NSW Environment Protection Authority for information.

INTRODUCTION

Site and Locality

The suburb of Mardi is situated south west of the Wyong town centre and comprises a mix of rural, rural residential and urban residential areas. The site (Figure 1) is located adjacent to urban development, west of the F3 and on the southern side of McPherson Road. The eastern boundary of the landfill is adjacent to Fairlight Circuit and the rear boundaries of residences along Riveroak Drive. To the south of the site is a bushland reserve.

Figure 1: Site and Locality Plan

The landfill site is owned by Wyong Shire Council and comprises an unformed road reserve and Lots 1 and 2 in DP 449738 and Lot 361 in DP 620853. These parcels of land are classified as Community Land under the *Local Government Act 1993* and categorised as General Community Use. The site also includes land to the south and west, being part of Lot 1 in DP 817815, which is also owned by Council and classified as Operational Land. This parcel is proposed to be used for the stockpiling of soil which would then be used to cap the former landfill. The bushland reserve to the south (Lots 371 and 372 in DP 880842) is Council owned Community Land and no works are proposed over these parcels.

To the north and west (west of the F3) of the site, land use comprises rural residential development. A timber mill/factory is located on McPherson Road on a lot immediately to the north of the site and urban development to the east and south of the site comprises mainly detached dwellings.

The site of the former landfill has been highly modified comprising a series of tiers or platforms which slope to the north and northwest.

Existing grades are typically 7 to 20 % and steeper on the batters (approximately 1 (Vertical) in 2 (Horizontal)). Despite being highly modified, the site does contain small areas of the Swamp Sclerophyll Forest Endangered Ecological Community (EEC) and other vegetation communities. The site is also identified as being partly flood affected by the 1% AEP flood event, is bushfire prone land and contains two transmission easements. The landfill is currently fenced off to prevent public access, although following remediation, it is intended to be suitable for public use for the purpose of passive recreation (e.g. walking/cycling trails).

Site History

The former landfill covers an area of approximately 7.5 ha. It was originally a sandstone quarry which was used as a landfill from the 1950s and received putrescible and non-putrescible waste from residential, commercial and industrial sources. The landfill was closed to the public in 1989, although Council continued to use the site for disposal of non-putrescible waste until 1999.

The land to the west of the former landfill (the proposed stockpile site) was acquired by Council in 1992 from the then Electricity Commission of NSW for the purpose of management of leachate from the landfill. Up until around 2008, the property was used intermittently by Council's Impounding Contractor for grazing and storage of impounded livestock (horses and cattle).

Council has carried out various investigations and assessments for the former Mardi Landfill in accordance with the *Contaminated Land Management Act (CLM) 1997*. A Site Auditor accredited under the *CLM Act 1997* has been involved throughout investigations of the site, which have included:

- Methane investigations near residences.

- Detailed Site Investigation including installation of monitoring wells and test pits; soil, groundwater and gas field measurements and chemical analysis of samples; and landfill cap permeability testing.

- Preparation of a Remediation Action Plan (RAP)

Boreholes taken through the landfill site encountered timbers, plastic bags, concrete, tyres, metals and some soil and silty-clay layers mixed with waste. The existing landfill has an average thickness of 13m, although in places, the waste may be up to 20m thick.

Project Description

The proposal is to be undertaken in three stages, as summarised in Table 1. A detailed description of each stage is provided below.

Table 1: Construction Stage Summary

Stage	Duration	Activities
Stage 1 Early Works	2+ years	Upgrading existing vehicle access point (western access) off McPherson Road Preparation of stockpiling areas Transport of capping material and topsoil to site Stockpiling of capping and topsoil
Stage 2 Remediation	8 months+	Site establishment and preparation Upgrading existing vehicle access point (north-eastern access) off McPherson Road Erosion and sediment controls Clearing and site preparation General earthworks to provide landform to accommodate final cap and end use as open space Leachate collection trench, storage and disposal Engineered cap Cap topsoil Cap stabilisation Rehabilitation of stockpile and construction areas Other works: replacement of groundwater monitoring wells, fence adjustments
Stage 3 Post-Remediation	2 years+	Landscaping and vegetation establishment Final site improvements to accommodate end use including perimeter access trail and walking/ cycle trails Maintenance and monitoring Leachate rising water main to sewer

Stage 1: Early Works

Access

Trucks would access the stockpile area via the existing western access off McPherson Road, which would need to be upgraded to cater for turning trucks. The internal access track is also proposed to be upgraded to provide heavy vehicle turning, parking and unloading areas. Fencing would be installed to secure the stockpile area.

Site Preparation and Sediment Controls

Trees and shrubs within the stockpile area would be cleared. Noxious weeds within the low-lying area would also be treated and removed at this time, with vegetation placed against the landfill batters for burial as part of the remediation earthworks. Sediment and erosion controls are to be installed, which would include diversion drains and a temporary sediment basin constructed to control runoff from the stockpile area. A wheel wash and shaker facility would be provided on the access track near McPherson Road.

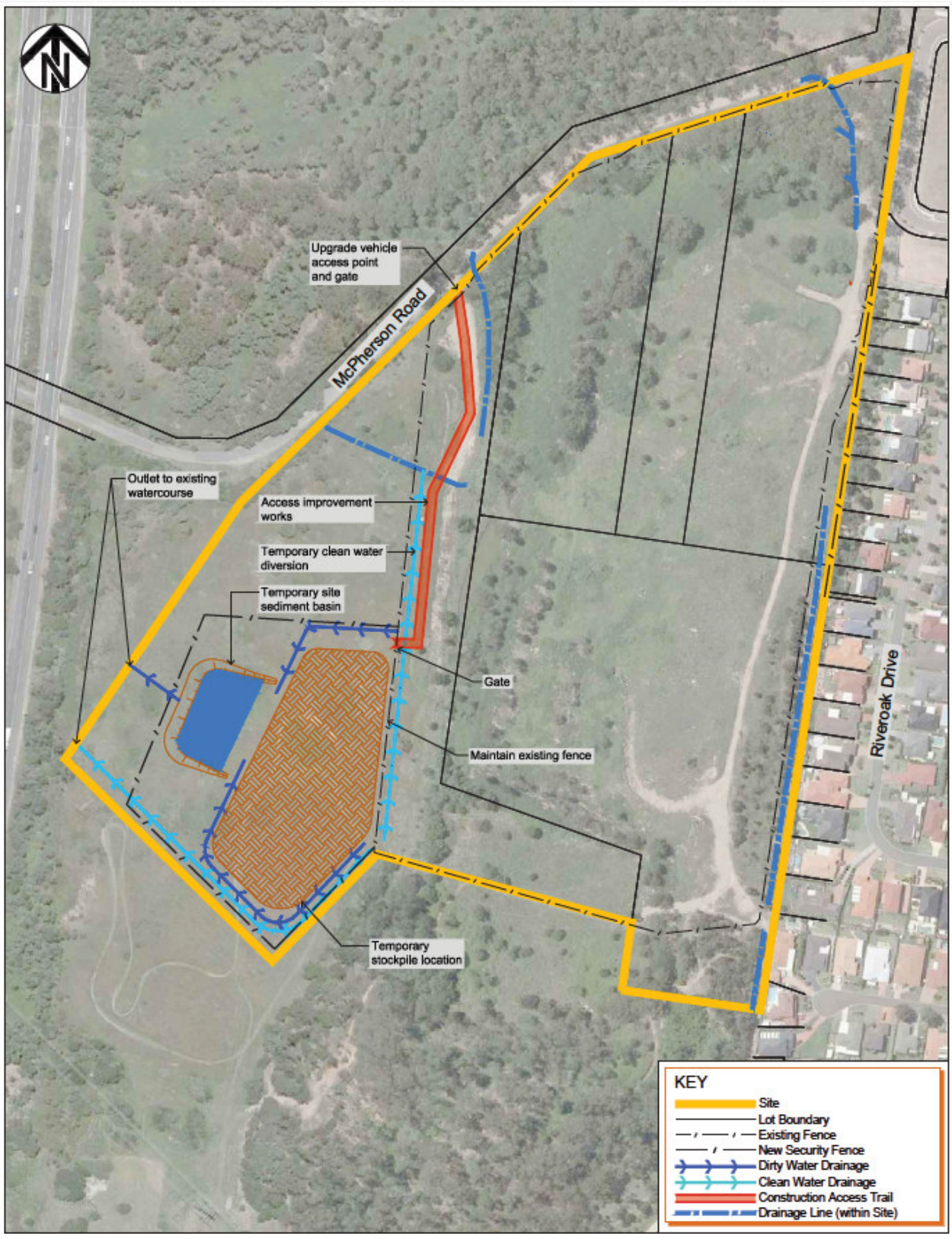

Figure 2: Stage 1 - Stockpiling

Figure 3: Western access from McPherson Road

Transport of Capping Material

Approximately 38,000 m^3 of imported fill would be required for the final cap. In addition, approximately 15,000 m^3 of topsoil would be required, which may also be stockpiled prior to the commencement of remediation works. No specific source sites of suitable capping material have been identified at this stage but it is intended to use suitable material from other Council works. Estimates of Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM) from past Council works programs indicate an approximate annual total in the order of 20,000 m^3/year. The probable maximum single excavation quantity available from a single works program job site would be around 3,000 m^3.

The application considered two scenarios for the delivery of capping material to the site:

- Scenario 1 (preferred, as discussed above): material from Council works projects, assumed to involve 12 to 20 trucking episodes over approximately two years.

- Scenario 2: material transported to site in one episode, concurrent with the remediation works. For this scenario the likely maximum transport rate would be 1000 to 2000 m^3/day, if capping achieved maximum efficiency. This would involve a maximum of 70 truck movements per day over approximately 8 weeks.

Stockpiling

The stockpile area would be approximately 150 metres long, varying in width between 50 and 90 metres, and have a footprint of approximately 11,000 m^2. Material would be stockpiled to a height of around 7 metres. Plant used for site preparation and stockpiling activities would include a dozer and water cart for dust suppression. Controls to minimise erosion of the stockpiled material due to wind and rain would be implemented progressively as material is received at the site. This would include wind fences and periodical use of a water cart for dust suppression, as well as other methods such as covering stockpiles.

Stage 2: Remediation

Site Establishment

This would involve some initial vegetation clearing to establish the site compound and construction access tracks. A site office and temporary amenities would be installed off the western access track. The area designated for contractor facilities would also house machinery sheds or other temporary facilities to store construction equipment and supplies. Approximately 10 worker carparking spaces would be provided along the shoulder of the western access track. Temporary power to the contractor facilities would be provided via connection to the overhead power line along the southern edge of McPherson Road. A permanent power connection would be required to the leachate facility. Potable water would be tankered in and stored on-site. Effluent from site facilities would be disposed of to a licensed facility.

The intersection of the eastern access track with McPherson Road would be upgraded to cater for turning trucks and the internal track is proposed to be extended to provide construction access around the entire base of the landfill. Additional fencing would be installed to secure the entire site and to exclude construction plant from areas where vegetation is to be retained.

Figure 4: Eastern access from McPherson Road looking up to former landfill

Site Preparation and Sediment Controls

Sediment and erosion control is proposed to include the following:

- A wheel wash and shaker facility on the western access track near McPherson Road;
- Additional sediment basin and diversion drains;
- Silt fences around disturbed areas and along the perimeter of the site adjacent to residences;

- Chainwire fences adjacent to properties would incorporate hessian or shade cloth to assist in minimising dust blowing off-site; and

- Water carts would also be used for dust suppression.

Clearing and Earthworks

Approximately 30,000 m^3 of the existing cap, comprising sandy or silty clay, would be redistributed over the landfill and batters as a subcap. The majority of this material (20,000 to 25,000 m^3) would be used to reduce the grades of the western and northern landfill batter.

Clearing and general earthworks would comprise the following:

- Removal of the top 100 mm of soil and associated vegetation to create a 'stripped surface' profile. This material would generally be pushed over the batters and become buried under the subcap. Trees would be kept where their locations would not interfere with placement of the final capping and where this work could be undertaken without damaging roots or creating tree instability.

- Excavating down to the design surface level, which would be a minimum of 300 mm above the landfill waste and moving, spreading and compacting this material to fill surface hollows, shape the landform and reduce batter slopes. This would also include filling the leachate ponds at the base of the batter as noted above.

Earthworks would achieve, on average, a 1.3 metres deep 'subcap' over the landfill comprising existing capping material (minimum depths would be 500 mm). The steep batters would be flattened to achieve a final grade of 1 V in 3 H. Cut-off drains would be installed at the top of the batter to reduce runoff down the flattened batters.

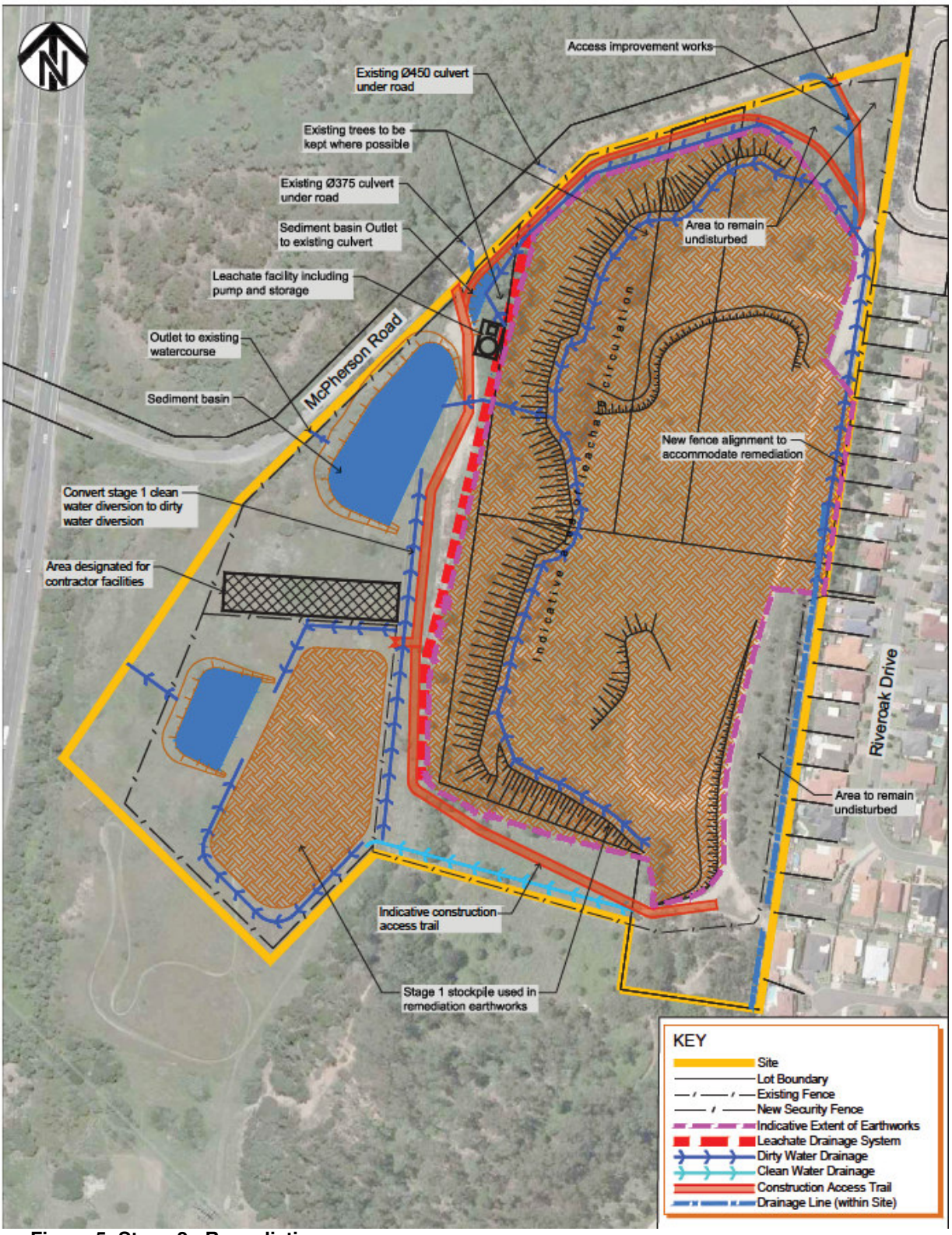

Figure 5: Stage 2 - Remediation

Capping

Capping would comprise of the following:

- Seal-bearing surface: the compacted subcap formed through reshaping the existing capping material.

- Sealing layer: this layer would be provided by the imported soil with a thickness of 500 mm and low permeability. Combined with the existing capping clays, this would provide an average sealing layer thickness of approximately 1.8 metres (and up to 2.0 metres), significantly exceeding the 500 mm seal layer required under EPA Guidelines. Grades across the final cap would typically be 7 -15 % which is in excess of the minimum 5% specified in the EPA Guidelines.

- Revegetation layer: a 200 mm imported topsoil layer with grasses and other landscape plantings to stabilise the final surface. Selected localised thickening of the revegetation layer (topsoil) to 1000 mm (an additional 800 mm) would be undertaken to facilitate establishment of stands of trees for shade and landscape amenity. Drainage swales would be formed at the top of the batters to control runoff down the remediated batters.

A typical cross section of the capped landfill is shown in Figure 6.

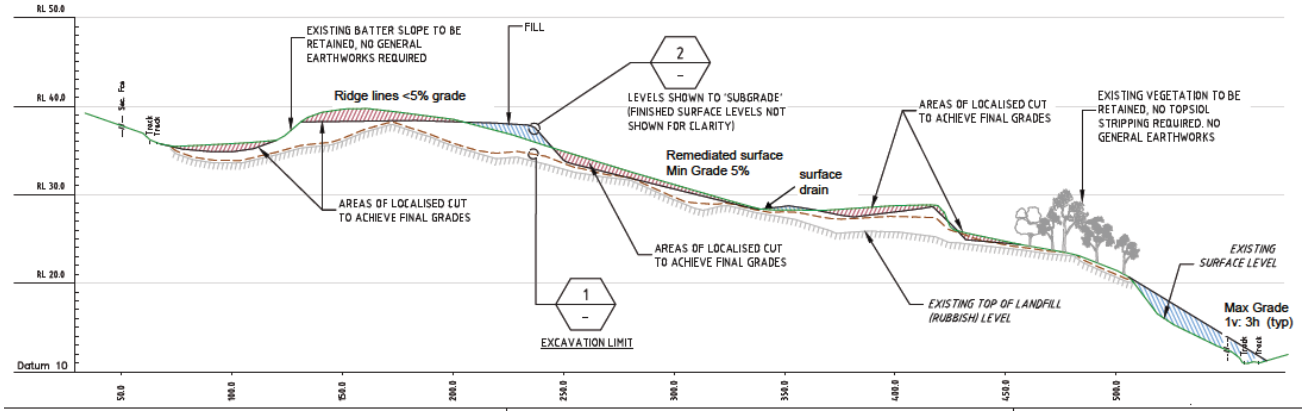

Figure 6: Typical Cross Section of Capped Landfill

Leachate Collection and Treatment

A leachate trench is proposed along the base of the landfill (as shown in Figure 7). The existing leachate ponds would be emptied by pump out to a tanker and disposed of off-site to a licensed liquid trade waste facility. Sediments exposed in the bases of these ponds are likely to be contaminated and would be left undisturbed and buried as part of the earthworks.

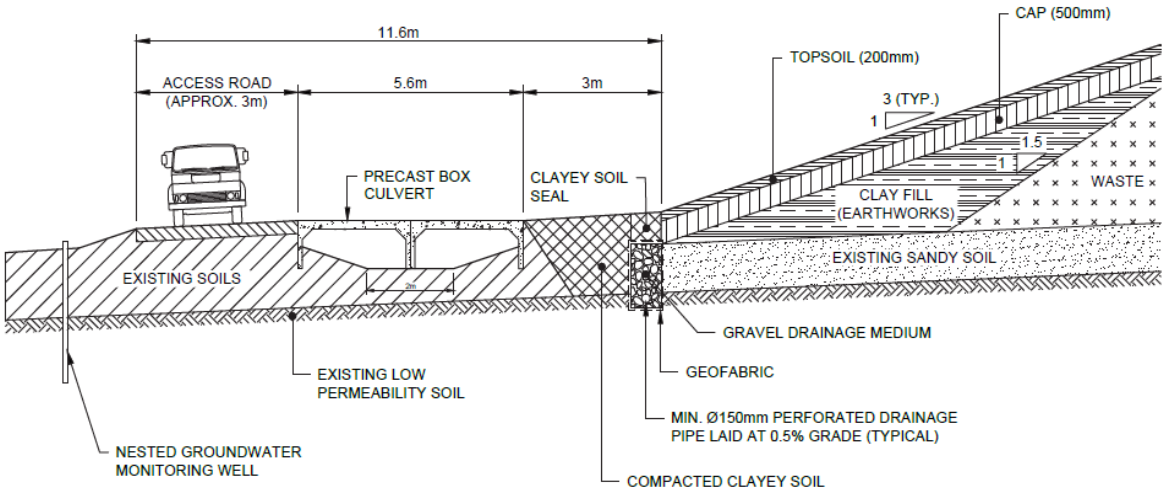

Figure 7: Leachate Interception Trench

The leachate trench is likely to be 1 to 3 metres deep to intercept the drainage layer (sandy soils) under the landfill. It would be backfilled with gravel and leachate would flow under gravity through a subsurface slotted pipe to a covered collection well. The well would be up to 5.5 m deep. Leachate would be pumped out of the collection well into an above ground tank for storage. A clayey soil barrier would be installed on the western side of the trench to contain leachate. A clayey soil 'seal' would also be placed over the trench to prevent surface runoff infiltration. Leachate would eventually be discharged to the reticulated sewerage system.

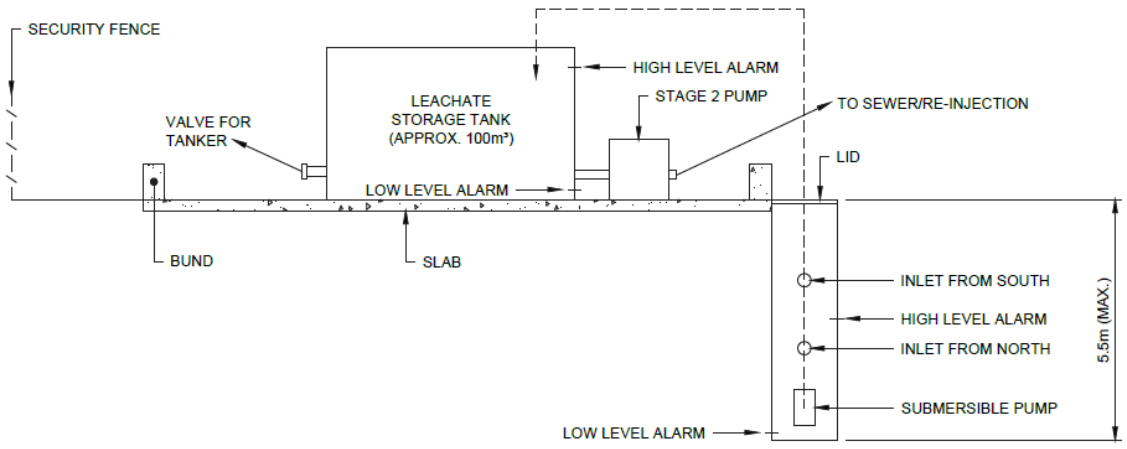

Figure 8: Leachate Storage Tank Details

Other Works

Other works would include:

- Replacement of groundwater and gas monitoring wells – this may include additional monitoring wells to provide more comprehensive site coverage.
- Removal of the stockpile sediment basin.
- Conversion of the main sediment basin to a stormwater detention basin.

- Rehabilitation of the stockpile area involving grading and spray seeding with native grasses.
- Removal of the stockpile area fence and other fence adjustments, such as to secure the leachate management facility area.

Stage 3: Post-Remediation

Open Space Development

The site would be developed as 'passive' open space with low-key recreational facilities, based on the preferred remediation landform. The final landform would provide large relatively flat areas separated by steeper slopes or benches. The site would be restored to a more natural state through landscape works and pedestrian/ bicycle access and service vehicle access would be provided. Post-remediation monitoring of ground and surface water quality and landfill gas generation would also be undertaken for 1 to 2 years post-remediation.

Service Vehicle and Pedestrian Access

The construction access tracks would be incorporated into two all-weather access tracks. The western access track would be sealed from the intersection with McPherson Road to the leachate management facility, with a sealed vehicle standing and manoeuvring area provided in this location. The eastern access track would be sealed from the intersection with McPherson Road to a vehicle standing and manoeuvring area. A sealed connection would also be provided to the existing fire trail access off Clementine Place.

Walking/ cycle trails would connect to the maintenance vehicle access tracks to form internal loop walking/ cycle trails. Trails would be approximately 3m wide with all-weather, erosion and wear resistant surfacing such as compacted crushed, graded sandstone. A sealed connection would also be constructed to the concrete pathway between properties in Riveroak Drive. A security fence between Fairlight Circuit and the site would remain, along with a security fence along McPherson Road. Other fencing/ barriers would be installed, where required, to prevent unauthorised vehicle access. Access gates to the maintenance vehicle tracks would be locked.

Figure 9: Stage 3 – Post Remediation

Connection to Sewer

Ultimately, leachate would be disposed of to the sewer via a rising main across the remediated landfill to a manhole near the existing access path to the site from Riveroak Drive. This connection was selected as there is limited capacity in the sewer mains to the north of the site (Fairlight Circuit). This would occur once suitable leachate quantity and quality were confirmed. The location and method of retrofitting the rising main into the remediated landform is still to be determined. In order to apply for an approval to discharge to the sewer, details on the volume and quality of leachate are required. Accordingly, monitoring for 1 to 2 years following remediation would be undertaken to confirm leachate generation rates, composition and characteristics prior to connection. A separate application under the Water Management Act 2000 would be required for the connection to the sewer and this is included as a condition of consent.

Site Validation

Components of the remediation that require validation to ensure the site is suitable for use as open space include:

- Capping material quality and permeability
- Imported fill quality
- Groundwater and surface water quality
- Landfill gas emissions

The results of monitoring immediately following remediation would be included in the validation report, prepared in accordance with the publication *Contaminated sites: Guidelines for consultants reporting on contaminated sites.*

Assessment Process

The Development Application was prepared and lodged as 'Designated Development' listed in Schedule 3 of the *Environmental Planning and Assessment Regulations, 2000* on the basis that the works may reasonably be considered "contaminated soil treatment works" that would treat or store contaminated soil not originating from the site and that is:

- Within 100 m of residential dwellings
- Treats more than 1000 m3 of contaminated soil not originating from the site
- Disturbs more than 3 hectares in aggregate of contaminated soil.

As such, an Environmental Impact Statement was prepared and external referrals and advertising proceeded on the basis of the application being Designated Development. However, following a meeting between the NSW Environment Protection Authority (EPA) and the Applicant, the EPA advised that the proposed work is not categorised as "contaminated soil treatment works" and therefore is not designated development. The rationale behind this decision is that the capping of an existing landfill site does not actually involve the treatment of the soil and therefore is not classed as "contaminated soil treatment works".

Consequently, the assessment and determination of the application is to proceed outside the requirements for Designated Development.

Summary of Issues

Potential adverse impacts have been assessed as low in relation to hazards and risks, air quality, soil and water, biodiversity and cultural heritage, provided activities are carried out in accordance with relevant management plans. However, during works, there are expected to be short term adverse impacts on residents from traffic, noise and vibration associated with the remediation. To manage these impacts, the contractor would be required to prepare specific management plans and undertaken community consultation with potentially affected residents. This approach is consistent with the *NSW Industrial Noise Policy* and *Assessing Vibration: a technical guideline* and is supported by the EPA.

Once completed, the remediation of the former landfill would provide environmental benefits, particularly in relation to the quality of water draining from the site and the removal of a large area of weeds. The remediation of the site would also provide benefits to the local community, through provision of public open space, including walking/cycling tracks.

VARIATIONS TO POLICIES

No variations to Council policy are proposed.

CONSULTATION

Submissions from the public

The application was advertised for a period of 30 days and notices were placed in the local newspaper and on the property fencing. No submissions from the public were received.

External referrals

The development application was referred to the NSW Department of Primary Industries - Office of Water (NOW) and the NSW EPA as integrated development in accordance with Section 91 of the EP&A Act. The development application was also referred to the Roads and Maritime Services (RMS) as the site adjoins the M1 Pacific Motorway.

Both the EPA and NOW have issued General Terms of Approval, which are to be included in any development consent that is granted. The RMS also provided recommended conditions of consent. The specific requirements of each agency are discussed further in the report and copies of correspondence are included in Appendix C.

Internal referrals

The application has been referred within Council to:

- Senior Development Engineer
- Development Planner – Ecologist
- Senior Environmental Health Officer
- Team Leader – Water and Sewer Planning
- Section Manager – Parks and Sportsfields
- Landscape Architect – Recreation Planning

The issues raised in the referral process are discussed in the report and where relevant reflected in the conditions of consent.

ECOLOGICALLY SUSTAINABLE PRINCIPLES

The proposal has been assessed having regard to ecologically sustainable development principles and is considered to be consistent with the principles.

The proposed development is considered to incorporate satisfactory stormwater, drainage and erosion control and the retention of vegetation where possible and is unlikely to have any significant adverse impacts on the environment and will not decrease environmental quality for future generations.

Climate Change

The potential impacts of climate change on the proposed development have been considered by Council as part of its assessment of the application. This assessment has included consideration of such matters as potential rise in sea level; potential for more intense and/or frequent extreme weather conditions including storm events, bushfires, drought, flood and coastal erosion; as well as how the proposed development may cope / combat / withstand these potential impacts. In this particular case it is considered that there are no matters that require further discussion.

ASSESSMENT

Having regard for the matters for consideration detailed in Section 79C of the EP&A Act 1979 and other statutory requirements, Council's policies and Section 149 Certificate details, the assessment has identified the following key issues, which are elaborated upon for Council's information.

Permissibility

Under Wyong Local Environmental Plan 1991 (WLEP 1991), the site contains multiple zones, as follows:

Property Description	**WLEP Zoning**
Lot 1 DP 449738	6(a) Open Space and Recreation
Lot 2 DP 449738	6(a) Open Space and Recreation
Unformed Road	6(a) Open Space and Recreation
Lot 361 DP 620853	6(a) Open Space and Recreation
Lot 1 DP 817815	1(c) Non Urban Constrained Land 7(a) Conservation

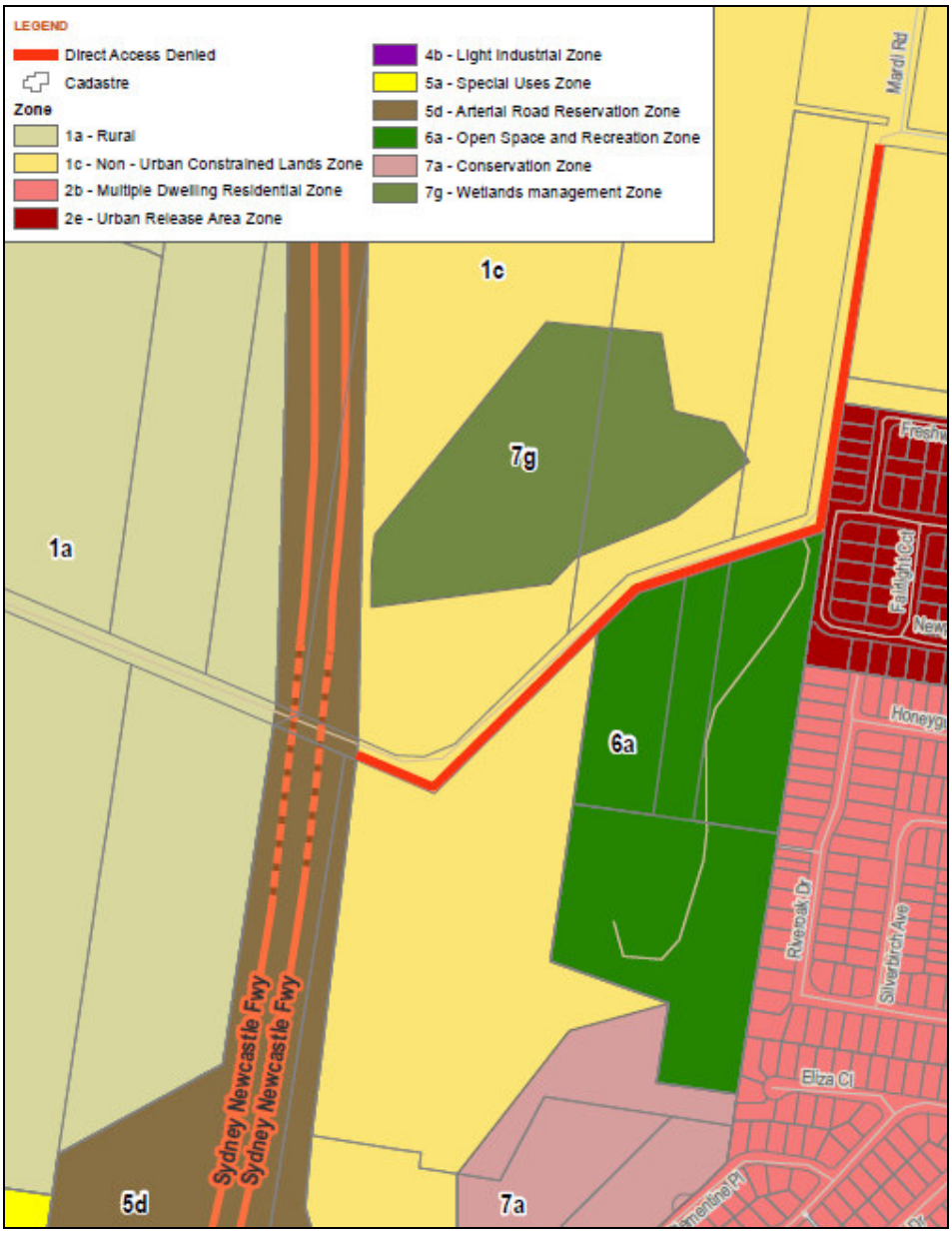

Figure 10: WLEP 1991 Land Use Zones

The proposed remediation of the site is not defined in WLEP 1991, although is permissible by virtue of Clause 8(1) of State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55), which states:

"A person may carry out a remediation work in accordance with this Policy, despite any provision to the contrary in an environmental planning instrument, except as provided by clause 19 (3)."

Clause 19 (3) states:

"If a provision of another State environmental planning policy or of a regional environmental plan, whether made before or after this Policy, requires development consent for a remediation work, a provision of this Policy that permits the carrying out of the work without development consent does not prevail over that provision."

Clause 8 further provides that a person must not carry out a Category 1 remediation work except with the consent of the consent authority, although Category 2 remediation work may be carried out without consent.

Category 1 remediation works are described in clause 9 of SEPP 55. This application was initially considered to be Category 1 remediation as it was prepared on the basis of being designated development. While the proposed work is not deemed to be designated development, part of the site is zoned 7(a) Conservation, which is a trigger under clause 9(e)(2) of SEPP 55. Therefore, the proposed remediation is considered to be Category 1 remediation, which is permissible with development consent.

The on-going use of the site for passive recreation is defined under WLEP 1991 as a 'recreation area', which has the following definition:

recreation area *means:*

"(a) a children's playground,
(b) an area used for sporting activities and sporting facilities,
(c) an area used by the Council to provide recreation for the physical, cultural or intellectual welfare of the community, or
(d) an area used by a body of persons associated for the purposes of the physical, cultural or intellectual welfare of the community to provide recreation for those persons,
but (in the Table to clause 10) does not include a building or place elsewhere specifically defined in this clause."

Recreation areas are permissible with consent in the 1 (c) Non Urban Constrained Land Zone, the 6(a) Open Space and Recreation Zone and the 7(a) Conservation Zone under WLEP 1991. The proposed development is also considered to be compatible with the objectives of these zones as required by clause 10.

In terms of determining the subject development application, clause 12 (1) of SEPP 55 states that:

The consent authority must not refuse development consent for a category 1 remediation work unless the authority is satisfied that there would be a more significant risk of harm to human health or some other aspect of the environment from the carrying out of the work than there would be from the use of the land concerned (in the absence of the work) for any purpose for which it may lawfully be used.

The proposed remediation work is not expected to result in any significant risk to human health nor is it anticipated that there would be any significant impact on the environment and the proposal is recommended for approval.

THE PROVISIONS OF RELEVANT INSTRUMENTS/PLANS/ POLICIES (s79C(1)(a)(i-v):

(a)(i) the provisions of any environmental planning instrument

State Environmental Planning Policy No 55 – Remediation of Land

Prior to granting development consent, clause 7 of SEPP 55 requires the consent authority to consider whether land is contaminated and if the land is contaminated, whether the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out. Given that the proposed use of the former landfill site is for recreational purposes, a detailed investigation (as referred to in the contaminated land planning guidelines) was undertaken.

The *Managing Land Contamination Planning Guidelines*, which accompany SEPP 55, provide guidance on assessing development proposals for contaminated sites, including the scope and content of preliminary site investigations, detailed site investigations (DSI), site remediation action plans (RAP) and validation and monitoring.

Based on the DSI, prepared by Environmental Earth Sciences, remediation of the landfill site is required before it is suitable for use as a recreation area. In this regard, a RAP has been prepared as required by Clause 17 of the SEPP and in accordance with guidelines. Compliance with the RAP has been specifically included the recommended conditions of consent. A notice of completion of remediation work must also be provided and this has also been included as a recommended condition.

State Environmental Planning Policy (Infrastructure) 2007

The western boundary of Lot 1 DP 817815 is adjacent to the M1 Pacific Motorway, which is a classified road, owned and controlled by the Roads and Maritime Services. Clause 101 of SEPP (Infrastructure) relates to development with frontage to a classified road and seeks to:

(a) to ensure that new development does not compromise the effective and ongoing operation and function of classified roads, and

(b) to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads.

In accordance with the SEPP, there is no access (either vehicular or pedestrian) to the classified road and the safety, efficiency and on-going operation of the classified road would not be adversely affected by the development. The on-going use of the site as a passive recreation area is located approximately 200 metres from the road and is not considered to be sensitive to traffic noise or vehicle emissions.

Wyong Local Environmental Plan 1991

Clause 15 - Development on land containing acid sulphate soils

This clause requires special consideration of development on land that is likely to contain acid sulphate soils (ASS). A Leachate Drain and Acid Sulphate Soils Investigation has been prepared by SMEC, which confirmed the presence of potential acid sulphate soils (PASS) in lower lying areas. Generally, the site has been determined to have a low risk of ASS or PASS. However, due to the variable and localised soil landscape present, including some occurrences of PASS, an ASS Management Plan has been prepared. Should ASS or PASS be identified during construction activities, the ASS Management Plan is to be implemented.

Clause 23 – Flood prone land

Consent is required for the carrying out of a work on land within a flood prone area and consideration is to be given to the effect of the proposed development on flooding. A small portion of Lot 1 DP 817815 is identified as being flood affected, although all works are proposed to be located outside the flood affected area.

Clause 24 – Development by the Council

Clause 24 of WLEP 1991 specifies that consent is required for works to be undertaken by or on behalf of Council, except for certain specified minor works. The proposal does not meet the criteria for development not needing consent under this clause.

Clause 28 – Tree Management

In accordance with this clause, consent is not to be granted for the removal of trees or native vegetation unless the works are ancillary to or necessary to undertake a use permitted on the land and an assessment has been made in relation to the importance of the vegetation in relation to:

(i) soil stability and prevention of land degradation, and
(ii) water quality and associated ecosystems, such as streams, estuaries and wetlands, and
(iii) scenic or environmental amenity, and
(iv) vegetation systems and natural wildlife habitats.

Subject to the mitigation measures proposed in the application for the removal of vegetation, the vegetation proposed to be removed is not deemed significant in regards to the above.

Clause 29 – Services

This clause requires there to be satisfactory provisions for the supply of water, and facilities for the removal or disposal of sewage and drainage prior to consent being granted for any development. The site is not currently serviced by Council's reticulated water or sewer systems, although there is not proposed to be any permanent amenities on the site that would require a connection these services. During works, a site office and temporary amenities would be installed off the western access track. Potable water is proposed to be tankered in and stored on-site and effluent from site facilities would be disposed of to a licensed facility. Given these would be only temporary facilities, the proposed arrangements are considered satisfactory.

In terms of drainage, the majority of runoff from the landfill discharges via pipes or box culverts beneath McPherson Road to the McPherson Road Wetland, which is located to the north of the site. Parts of the Eastern Batter shed water east towards residential properties, where flows are directed to a pit connected to the stormwater network in the Mardi residential area.

Clause 37 – Prohibitive access

The zoning map under WLEP 1991 identifies the full McPherson road frontage of the site as "boundaries across which direct access is denied". This clause of WLEP 1991 prohibits the creation of vehicular crossings in, on or through the boundaries of any land identified in this manner. However, subclause (2) states that the Council may grant consent to a vehicular crossing on land to which this clause applies where it is satisfied that development would not be practicable unless direct vehicular access is provided.

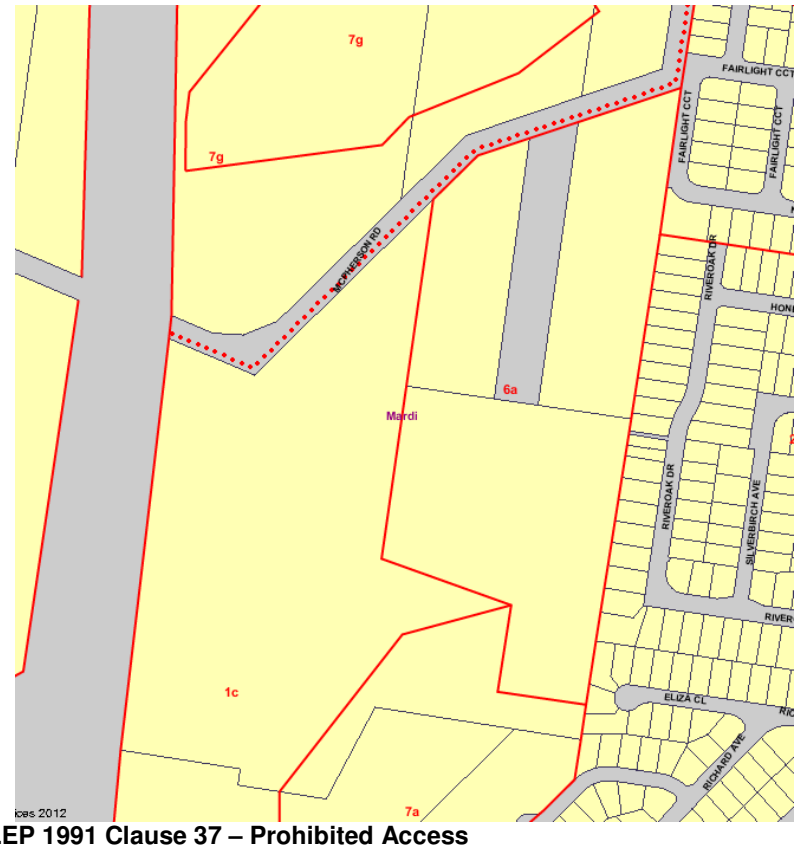

Figure 11: WLEP 1991 Clause 37 – Prohibited Access

In this instance, the site is only accessible from McPherson Road (no access available from the M1 Pacific Motorway) and it is proposed to utilise the two existing vehicular access points into the site. Having regard for subclause (2), the development would not be practicable unless direct vehicular access from McPherson Road is available and it is recommended that consent be granted on the basis of there being one access crossing into the landfill site and one crossing into the stockpile site. Once works are completed, vehicular access to the site would be for maintenance vehicles only.

Clause 50 – Development on public roads

A section of the landfill platform is located over a road reserve. Clause 50 of WLEP 1991 permits development on a public road shown on the zoning map or a lawfully closed road, for a purpose that may be carried out on adjoining land. Both the road reserve and the adjoining land is zoned 6(a) Open Space and Recreation, within which the proposed end use as a recreation area is permissible with consent.

(a)(ii) the provisions of any draft environmental planning instrument

Draft Wyong Local Environmental Plan 2012

Draft Wyong Local Environmental Plan 2012 (WLEP 2012) has been publically exhibited and has been forwarded to the Department of Planning and Infrastructure to be gazetted. Draft WLEP 2012 and is based on the Standard Instrument which is being progressively implemented throughout NSW.

Under Draft WLEP 2012, the site contains multiple zones, as follows:

Property Description	**Draft WLEP Zoning**
Lot 1 DP 449738	RE1 – Public Recreation
Lot 2 DP 449738	RE1 – Public Recreation
Unformed Road	RE1 – Public Recreation
Lot 361 DP 620853	RE1 – Public Recreation
Lot 1 DP 817815	E2 – Environmental Conservation E3 – Environmental Management

The provisions of the draft LEP do not alter the permissibility of the proposed remediation under SEPP 55 and the on-going use of the site as a recreation area remains permissible within each of the zones listed above.

(a)(iii) any development control plans

Wyong Development Control Plan 2005 applies to the site, with the following Chapters being applicable to the proposed development:

- Chapter 14 – Tree Management
- Chapter 67 – Engineering Requirements for Development
- Chapter 69 – Controls for Site Waste Management

The proposal has been assessed against the provisions of the above and is consistent with these Chapters.

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

There are no planning agreements applicable to the application.

(a)(iv) any matters prescribed by the Regulations

The Regulations require consideration of the following:

- The Government Coastal Policy, being NSW Coastal Policy 1997: A Sustainable Future for the New South Wales Coast; and
- in the case of a development application for the demolition of a building, the provisions of AS 2601.

As included in the Regulations, Wyong LGA is only affected by the seaward part of the Government Coastal Policy, being the area extending 3 nautical miles seaward from the open coast high water mark. As such, it is not applicable to the proposed development.

The development does not propose the demolition of any buildings.

(a)(v) any coastal zone management plan

Section 79C(1)(a)(v) of the EP&A Act requires consideration of any Coastal Zone Management Plan (within the meaning of the Coastal Protection Act 1979). The Wyong Coastal Management Plan has been publically exhibited and adopted by Council and is now awaiting Certification. In accordance with the Plan, the site is not affected by coastal hazards.

THE LIKELY IMPACTS OF THE DEVELOPMENT (s79C(1)(b)):

Access, transport and traffic management measures

There are three vehicle access points to the site, being a partly sealed fire trail from Clementine Place (residential cul-de-sac) controlled by a boom gate; and two gravel tracks off McPherson Road. A chainwire fence currently surrounds the landfill and vehicle access tracks. There is no public parking on the site or formal on street parking along McPherson Road adjacent to the site. The two existing accesses from McPherson Road would need to be upgraded as part of the development to enable trucks to enter and leave the site safely and efficiently.

For Stage 1 there is expected to be up to 40 truck movements per day hauling fill to the stockpile. The preferred route for transporting capping material and construction plant and equipment to the site would be via the M1 Pacific Motorway, Old Maitland Road and McPherson Road. Old Maitland Road currently operates at Level of Service C and McPherson Road at Level of Service A. Traffic control, in accordance with a Traffic Management Plan, would be required during trucking and delivery of capping and topsoil to the site to minimise impacts on motorists. Trucks would enter the site from the western access off McPherson Drive and then continue along a construction access track to the stockpile. The proposed internal grades and vehicle manoeuvrability would need to comply with the relevant Australian Standards. Internal tracks are proposed to be approximately 3 m wide with all-weather, erosion and wear resistant surfacing such as compacted crushed, graded sandstone. For Stage 2, both accesses from McPherson Road are proposed to be used and would then be sealed as part of Stage 3.

Following remediation the only vehicles accessing the site would be service vehicles for maintenance and monitoring activities, which would occur approximately once a month. No on-site parking is proposed as vehicle access to the site from McPherson Road is restricted and the site is intended as a resource for the local community to be accessed via bicycle or foot.

Public domain (recreation, public open space, pedestrian links)

Post-remediation, the site is proposed to be available to the community as a ‘passive’ open space with low-key recreational facilities, based on the preferred remediation landform. The final landform would provide large relatively flat areas separated by steeper slopes or benches. High points would provide lookout/ viewing areas. Walking/ cycle trails would connect to the maintenance vehicle access tracks to form internal loop walking/ cycle trails having maximum grades of 1 in 20.

Pedestrian access to the site currently includes a 3 m wide path off Riveroak Drive between houses (which contains a narrow concrete path and steps and also acts to convey stormwater) and an informal track to the south through bushland at the back of Clementine Place. These existing access points are to be retained and would provide ongoing access for pedestrians and cyclists.

Utilities supply

Water

It is not proposed to connect to the site to the reticulated water supply as it is not proposed to provide permanent amenities for the remediated site. Potable water for the contractor's facilities during the remediation stage would be tankered in and stored on-site. Water would also need to be brought in for dust suppression and for vegetation establishment.

Sewer

Ultimately, leachate would be disposed of to the sewer via a rising main across the remediated landfill to a manhole near the existing access path from Riveroak Drive. This connection was selected as there is limited capacity in the sewer mains to the north of the site (Fairlight Circuit). The connection to the sewer can only occur once suitable leachate quantity and quality are confirmed. Accordingly, monitoring for 1 to 2 years following remediation would be undertaken to confirm leachate generation rates, composition and characteristics. The location and method of retrofitting the rising main into the remediated landform is still to be determined and would require separate approval under the Water Management Act 2000.

Electricity

Temporary power to the contractor facilities would be provided via connection to the overhead power line along the southern edge of McPherson Road. A permanent power connection would be required for the leachate facility.

Heritage significance

Aboriginal Sites

An Aboriginal Heritage Impact Assessment for the proposed development was prepared by McCardle Cultural Heritage Pty Ltd. A search of the Aboriginal Heritage Information Management System (AHIMS) register identified 54 known Aboriginal sites and one Aboriginal Place recorded within 5 km of the site. The site was surveyed on foot by an archaeologist and registered Aboriginal stakeholder representative. No sites or Potential Archaeological Deposits (PADs) were identified. It is likely that past land uses and impacts that would have destroyed any evidence of past occupation.

Non-indigenous Heritage

Two items of local heritage significance are identified in WLEP 1991 as being within the suburb of Mardi. These are a dwelling and shed on Mardi Road and the Collies Lane road bridge over Deep Creek, which are located approximately 560 metres to the north of the site. The proposal is unlikely to have any impact on these items.

Water

A Water Management Technical Assessment for the proposal was completed by SMEC in January 2013. The assessment found that there is evidence of leachate entering receiving waterways from the former Mardi Landfill site and therefore, the proposed remediation of the former landfill site will provide a substantial beneficial impact on the receiving environment. This includes:

- Reducing leachate generation through the provision of an impermeable cap and efficiently shedding water from the surface;

- Leachate capture in a leachate interception trench, and disposal to sewer in the long-term, thereby reducing the risk of contaminants migrating to the downstream waterways and wetlands;

- Capture and attenuation of surface water runoff from the remediation site within the detention basin to reduce peak flows from the site to below that of the current conditions, as well as maintaining, where practicable, low-flows and frequency of discharges from the site into the downstream wetland system.

The proposed water management for the site also provides measures to ensure that construction impacts are minimised through an appropriate erosion and sediment control plan including:

- Diversion of clean runoff around the site
- Dirty water drains to capture sediment laden runoff
- Sediments basins to remove sediments prior to release
- Minimal engagement with the landfill, with contingency measures in place for the placement of waste encountered within bunded areas to prevent off-site migration of contaminants in surface water.

A monitoring program has been developed to continue assessing baseline conditions, as well as to monitor surface and groundwater during the remediation works to reduce the risk of off-site contamination. After the remediation is complete, monitoring of surface water, groundwater and leachate will be undertaken to assess the effectiveness of the works in reducing off-site migration of contaminants from the former landfill, and that relevant water quality targets are met. Water quality monitoring is also a requirement of the EPA licence that needs to be obtained for the proposed works. It is considered that the proposed works will result in a net overall improvement in the site groundwater and surface water through the proposed site regrading, capping and integrated water management strategy including leachate interception and disposal.

Leachate

The volume of leachate to be disposed of would likely be greatest immediately after capping. Capping the landfill would reduce the volume of leachate generated over time, as infiltration into the waste would reduce. Modelling using the Hydrologic Evaluation of Landfill Performance (HELP) model was undertaken to gain an indication of leachate generation for the purposes of sizing the leachate trench and storage tank. For the capped site, the average volume of leachate arriving at the bottom of the waste was estimated to be around 12 m^3/per day or 18 m^3/day in the worst case. This compares with an estimated average of around 29 m^3/day for the existing landfill conditions.

Reinjecting leachate into the landfill is the preferred interim method of leachate disposal, prior to disposal to sewer. The rate of pumping must not exceed the rate of reabsorption back into the waste and the siting and number of leachate reinjection wells would be determined during the detailed design phase. If there were times when leachate volumes exceeded those that could be reinjected into the landfill waste, tankering off-site to a licensed facility would occur. Design features and maintenance procedures for management of leachate would include:

- Incorporation of leachate monitoring/ cleaning wells in the leachate trench to clear any blocking/ clogging of the perforated leachate collection pipe.
- Monitoring of water levels in leachate trench wells, particularly after high rainfall.
- Installation and monitoring of shallow and deep groundwater monitoring wells immediately down-gradient of the leachate interception trench.
- Telemetry and high level alarm in the case of leachate well pump failure.

Soils

Earthworks have the potential to result in erosion and increase sediment load to downstream waterbodies. Conceptual Erosion and Sediment Control Plans have been prepared and include clean and dirty water diversion drains; sediment fences; stockpiling capping material and soil at least 5 m from drainage lines; and construction of sediment basins. Conditions requiring the preparation of final Erosion and Sediment Control Plans and the incorporation of mitigation measures in the CEMP are recommended.

Air Quality

Dust

Material would be stockpiled over a period of up to two years. During this time material could be blown off stockpiles (as well as being eroded during heavy rainfall). Dust would also be generated during earthworks. Dust from stockpiles is unlikely to impact on residents or businesses as the stockpile area would be located approximately 300 m from surrounding buildings and on land lower than surrounding development and much lower than the Mardi residential area. Vegetation screening the site along the F3 and McPherson Road would act as a wind break and wind barriers and wind fences are proposed to be progressively installed around stockpiles. Other stockpile protection measures are also proposed including erosion control matting and blankets or plastic sheeting. Water carts would be used for dust suppression during earthworks and hessian or shade cloth would be installed on the perimeter fence adjacent to the Mardi residential area to reduce dust migration off-site.

Odour

It is not intended to excavate into the landfill waste, therefore no odour from decomposing waste is anticipated. The most likely source of odour at the site would be from exposure of sediments in the existing leachate basins when they are pumped out prior to filling, possible odours from excavation into ASS, and odours from leachate and soils/waste that are encountered during excavation of the leachate trench.

The existing ponds are remote from residential properties, with the closest dwellings approximately 200 m to the east, approximately 15 m higher than the ponds and located behind the landfill platform ridge line. Having regard for these factors, the impact of odours would largely be confined to the immediate area around the ponds. On completion of pumping out the ponds, fill from the stockpile area would be placed over the bed of the ponds to suppress odours, prior to commencing the remediation earthworks. Any ASS encountered would be neutralised with Aglime, which would also assist in odour suppression.

Landfill Gases

It was reported in the RAP that due to the age and nature of residual waste in the landfill, it is unlikely to produce significant landfill gas. Further, it is anticipated that with the reduction in infiltration of water into the landfill waste, the rate of biological activity would slow and the volume of methane would reduce over time. To avoid any excavation through the landfill, passive venting through the cap is proposed at this stage, with ongoing monitoring to determine whether any gas management systems are required to be retrofitted.

Flora and fauna

Flora

Four vegetation communities have been identified on the site, being: Disturbed Open Forest (Spotted Gum), Disturbed Swamp Forest (Swamp Mahogany, Cheese Tree and *Melaleuca linariifolia*), Disturbed Land (Smooth-barked Apple, Swamp Oak and Brush Box) and Disturbed Open Grassland. The Disturbed Swamp Forest is considered to equate to the Swamp Sclerophyll Forest Endangered Ecological Community (EEC).

The majority of vegetation would be removed over the landfill area, with trees and shrubs characteristic of Swamp Sclerophyll Forest EEC being retained where possible. Some of the larger Tallowwood and Sydney Blue Gum planted along the top of the northern end of the landfill batter may be retained however their removal is more likely. The stand of Spotted Gums in the north-eastern corner of the site would be substantially retained. The plantings on the southern half of the eastern batter and bushland at the south-eastern extremity of the site (where the threatened species Little Bentwing-bat and Varied Sittella were recorded) would be retained. The existing ponds associated with the landfill would be filled in and covered under the modified batters. However, a riparian corridor would be provided along the western base of the remediated landfill batter, incorporating areas of ponded water and part of the mapped EEC area. This would connect to the McPherson Road Wetland via the culvert under the road.

Ecological improvements are expected over the site through removal of a large area of weeds and associated seed source. Benefits to the McPherson Road Wetland (to the north of McPherson Road) are likely, both due to the removal of a weed seed source and reduction in nutrient loads through capture of a proportion of leachate. Ecological improvements would also be achieved through landscaping with locally indigenous plant species. The selection of plant species for the riparian corridor planting would comprise species characteristic of the EEC.

A Seven Part Test assessment of Significance has been undertaken for the Swamp Sclerophyll Forest EEC, which concluded no significant impact by the proposal.

The ecological assessment submitted with the application also identified potential habitat for one Endangered Population and seven threatened flora species in the study area, although none of these species were recorded during field surveys. The Assessments of Significance (state and national) concluded a significant impact to be unlikely.

Fauna

Two threatened fauna species, being Varied Sittella and Little Bentwing-bat, were recorded during the field surveys. The ecological assessment submitted with the application identified potential foraging habitat for an additional 20 threatened animals. No potential breeding or nesting habitat was identified. Only a few small tree hollows were observed and were not suitable for threatened species.

Assessments of Significance were prepared for the threatened species, which concluded a significant impact to be unlikely.

Migratory Fauna

Potential habitat was identified for the following migratory species: Rainbow Bee-eater, Satin Flycatcher, Little Curlew, White-bellied Sea-eagle and Rufous Fantail. Significant Impact Criteria Assessments have been undertaken for these species and concluded that the proposal is unlikely to have a significant impact on these species.

Weeds

A large number of weeds are present on site including Lantana, Blackberry, Tussock Paspalum, Whiskey Grass, and Fireweed. Control methods of these and other weeds are to be included in the Construction Environmental Management Plan. A Weed Management Plan is to be prepared and included the Operational Environmental Management Plan (OEMP).

Noise and vibration

A Noise and Vibration Assessment has been prepared by SMEC, which identifies the potential noise and vibration impacts of the proposal and measures that would need to be considered by the contractor in undertaking the works.

Traffic Noise

Traffic noise associated with trucking capping material to the site along the eastern route is expected to comply with the EPA's *Road Noise Policy* based on worst case traffic volumes and is therefore considered acceptable. The application notes that exceedances are expected on McPherson Road along the western route (affecting the two dwellings closest to the road, west of the F3) as that section of road is largely unsealed. However, Council has now sealed McPherson Road from Old Maitland Road to Gavenlock Road since the noise study was completed.

Construction Noise

Noise levels would generally comply with the target noise management levels (based on the representative background noise monitoring and the *Interim Construction Noise Guidelines* (DECCW 2009)), at the nearest and potentially most affected dwellings to the east of the site. However, noise management levels are likely to be exceeded when works are being undertaken close to the site boundary and would lie close to, and possibly exceed, 75 dBA which the construction noise guideline identifies as "highly noise affected".

At the south-western dwellings, located east of the F3 Freeway, noise management levels would generally be complied with, however marginal to significant exceedances may occur when works are carried out closest to the dwellings.

Noise levels are expected to comply with the noise management levels at the properties to the south and north-west of the site.

Compliance with noise management levels is not mandatory and the *Interim Construction Noise Guidelines* recommends that where target levels are not likely to be met, there should be communication with the impacted residents, clearly explaining the duration and noise level of the works, and provide details of any respite periods. A Construction Noise and Vibration Management Plan is proposed to be developed and implemented prior to carrying out the works, which would include details of mitigation measures as well as details of proposed community consultation.

Vibration

In relation to vibration, the criterion associated with building damage may just be complied with during use of a static mass roller compactor. In the case of human comfort, vibration during pass by of the roller is likely to be clearly perceptible when operating closest to the eastern boundary.

As with noise, the criteria contained in *Assessing Vibration: A Technical Guideline* (DECC 2006) are non-mandatory. Where all feasible and reasonable measures have been applied and vibration values are still beyond the maximum recommended value, the operator would need to negotiate directly with the affected community.

The EPA reviewed the Noise and Vibration Assessment submitted with the application and noted the exceedences of road and construction noise at certain stages of the development, as well as likely vibration impacts from rollers or vibrating compactors and accepted the mitigation option of preparing a Construction Noise and Vibration Management Plan.

Natural hazards (flooding, tidal inundation, bushfire, subsidence, slip etc.)

Flooding

The northwest corner of Lot Lot 1 DP 817815 is mapped as being affected by the 1% AEP flood event as illustrated in Figure 12 below. The application specifies that the proposed stockpile area, construction site facilities and leachate facility would be located above the 1% AEP flood event and that permanent site facilities (e.g. leachate storage facility and western maintenance access track) would be above the Probable Maximum Flood (PMF) level of 6.5 m AHD. Although it is not proposed to undertake any work within the flood affected area, the temporary site sediment basin is located within close proximity to the flood line. To ensure that no works, or the storage of materials or equipment occurs within the affected area, it is recommended that a condition be included requiring the flood extent to be shown on all construction plans.

Figure 12: 1% AEP Flood Extent

Bushfire

The site is mapped as being bushfire prone land. The existing Asset Protection Zone (APZ) along the rear boundaries of residences in Riveroak Drive adjoining the site would be maintained.

The existing fire trail from Clementine Place would also be retained. Council's Senior Planner – Property Management has recommended that a formal fire trail be provided around the base of the landfill from Clementine Place to the western access off McPherson Road. Conditions of consent are recommended in relation to complying with Council's Fire and Land Management Trail Construction Guidelines.

The application also states that the eastern trail would be wide enough (3 m) to accommodate fire fighting and emergency vehicles, although the standard for fire trails exceeds 3 metres. Due to the presence of an EEC at the entrance to the eastern trail, it is not recommended that this be formally identified as a fire trail.

Technological hazards

Lot 1 DP 817815 contains two easements for transmission lines, with one being 110 metres wide and the other being 30.48 metres wide. Both of these easements contain high voltage power lines. The extent of the identified site area is located outside these two easements.

Safety, security and crime prevention

Consideration has been given to the principles for crime prevention through environmental design (CPTED) in relation to the ongoing use of the site. Features of the site design and other measures include:

- Existing CCTV security cameras are to be retained.
- The Asset Protection Zone (APZ) which separates the residential properties from the eastern access trail and main area of open space would be kept clear of understorey species, providing sight lines from the rear of residential properties.
- Site lighting is to be considered at the detailed design phase.
- The majority of the site would be covered in low plantings, particularly adjacent to walking trails, to maintain sight lines across the former landfill platform and avoid creation of areas where offenders could hide.
- Trails have been designed as interconnecting loops to avoid areas which could pose an entrapment risk (i.e. deadends).
- The site would continue to be fenced and secured during remediation works and for a period of time (around 2 years) post-remediation.
- Post-remediation, security fences would remain along Fairlight Circuit and the McPherson Road frontage to the western service access point.
- The three service/ emergency vehicle access points would be locked. The main purpose of fencing would be to prevent/discourage access by unauthorised vehicles and motor bikes.

Construction Impacts (construction site management, protection measures)

The contractor for the project would be required to prepare a Construction Environmental Management Plan (CEMP), prior to commencement of works, based on the mitigation measures and management plans identified in the application. Specific measures have been identified in relation to hazards and risks; traffic; noise and vibration; air and water quality; biodiversity; cultural heritage; and validation, post-remediation monitoring and management.

THE SUITABILITY OF THE SITE FOR THE DEVELOPMENT (s79C(1)(c)):

A review of Council's Land Information mapping identifies the following constraints:

- Bushfire prone land
- Flood affected land
- Contaminated land

In addition, the site contains two electricity transmission easements and a small area of EEC.

The proposed development has been designed to address these constraints, and subject to conditions, do not render the site unsuitable for the proposed development.

ANY SUBMISSION MADE IN ACCORDANCE WITH THIS ACT OR REGULATIONS (s79C(1)(d)):

Any **submission from the public**.

Clause 13 of SEPP 55 states that category 1 remediation work is identified as 'advertised development', unless the remediation work is designated development, or State significant development and that the notification period for advertised development is extended to 30 days (i.e. the period for category 1 remediation is the same period as applies to all other development that involves public participation including designated development). The application was advertised for a period of 30 days and notices were placed in the local newspaper and on the property fencing. No submissions from the public were received.

Any submission from public authorities.

NSW Environment Protection Authority

The EPA has provided General Terms of Approval (GTAs) for the proposed Development, which requires a licence for waste storage under the Protection of the Environment Operations Act. A copy of the GTAs are included in attachment C. In summary, the EPAs response addressed matters relating to discharges to air and water, the volume of VENM and ENM brought onto the site, hours of operation, noise, odour, dust, stormwater and sediment control and monitoring. The EPA also commented on a number of other environmental matters and generally agreed with the mitigation measures identified in the application as well as the preparation of a CEMP including specialist management plans.

NSW Office of Water

The NOW has provided GTAs for the proposal, which requires a Water Licence to interfere with groundwater. A Controlled Activity Approval is not required, as Council as a public authority is exempt from this requirement under the water Management Act 2000. The GTAs specifically refer to monitoring bores and leachate interception works. A copy of the GTAs are included in attachment C.

Roads and Maritime Services

The RMS owns land adjacent to the subject site, being the M1 Pacific Motorway. The RMS has reviewed the proposal and has no objections to the proposed development subject to

- No direct vehicular access to/from the M1 pacific Motorway
- Any stormwater discharged to the M1 from the development not exceeding the capacity of the M1 stormwater drainage system; and
- All works being undertaken to Council's requirements at no cost to RMS.

The proposal satisfies the above, as no is proposed and it is not proposed to discharge any water to the M1.

THE PUBLIC INTEREST (s79C(1)(e)):

Any Federal, State and Local Government interests and community interests

Council Policy

The proposal is consistent with the aims and objectives of Council's Land Use and Planning Policies for landscaping (Policy L1), potentially contaminated land (Policy P1), filling of land (Policy F3) and erosion and sediment control (Policy E1).

Plan of Management – Community Use

Lots 1 and 2 DP 449738 and Lot 361 DP 620853 are classified as Community Land under the *Local Government Act 1993* and categorised as general community use. Council's Plan of Management No 5 for Sportsgrounds, Parks and General Community Use applies to the site, which lists providing recreation areas as a core objective for the management of community land categorised as general community use.

The remediation of a former landfill site is considered to be in the interest of all levels of government and the community. The proposal would improve environmental conditions as well as provide a passive recreation area for the local community.

OTHER MATTERS FOR CONSIDERATION

Section 94A Contributions Plans

The site is located within the area for Wyong District Development Contributions Plan No 1, although does not generate any contributions under this plan. However, Council's Section 94A Contributions Plan, is applicable where no other Section 94 contributions are imposed. Under the Plan, a contribution of 1% of the value of the development would be required, which equates to $89,000 for the proposed development.

The objective of the adopted Plan is to provide Council with an opportunity to ensure that appropriate development contributions can be levied on developments that currently do not pay contributions under Section 94, or pay a minimal contribution when compared to the size and value of the development. The levies collected under the adopted Plan are identified as assisting in the future provision of The Art House and the cycleway network. In this instance, it is considered unreasonable to apply the contribution as the proposed landfill remediation incorporates the construction of walking/cycle paths as part of the development and would not generate any demand for the Art House.

CONCLUSION

The proposal has been assessed using the heads of consideration in S79C of the Environmental Planning and Assessment Act 1979. It is generally considered the proposed development is suitable for approval subject to conditions.

The proposal is recommended for approval.