



Hills DCP Compliance Table

Maroota Friable Sandstone Extraction Project

MAY 2021 | 099278.10EIS



Deerubbin LALC

DESIGN
COLLABORATIVE



Under Section 11 of State Environmental Planning Policy (State and Regional Development) 2011, Development Control Plans do not apply to State Significant Development. Nevertheless, an assessment of the Project against 'Part B: Section 1 – Rural Part 2: Extractive Industries' of the Hills Development Control Plan has been included in the EIS at the request of the Hills Shire Council.

The below table summarises the Project's compliance with the relevant chapters of 'Part B: Section 1 – Rural Part 2: Extractive Industries' of the Hills Development Control Plan. A detailed assessment against these provisions is provided in the subsequent pages.

Table 1 – Hills Development Control Plan Compliance Table

Chapter	Compliance
1. Site Planning	Majority Compliance – see detailed assessment
2. Transport	Complies
3. Water Resources	Complies
4. Visual Amenity & Scenic Quality	Complies
5. Flora & Fauna Buffer Zones	Non-compliance – see detailed assessment
6. Heritage & Archaeological Resources	Complies
7. Soil Conservation	Complies
8. Acoustic Management	Majority Compliance – see detailed assessment
9. Air Quality Management	Complies
10. Rehabilitation	Complies
11. Community Engagement	Complies
12. Setbacks from the Maroota Public School	Complies
13. Section 94 Contributions	Complies
14. Environmental Management Systems	Complies
15. Information Required for an Extractive Industries DA	Complies

Table 2 — Hills Development Control Plan Detailed Assessment		
Provision		Compliance & Comment
Part B: Section 1 — Rural Part 2: Extractive Industries		
1. Site Planning		
Adjoining property boundary	Minimum setback of 10m	Complies A minimum setback of 10m is provided between the proposed extractive industry, including the extraction pit and site infrastructure, and the Project Site's property boundaries.
Public road	Minimum setback of 30m	Complies A minimum setback of 30m is provided between the proposed extractive industry, including the extraction pit and site infrastructure and Wisemans Ferry Road.
National Park, State Forest or Crown Lands boundary	Minimum setback of 40m	Complies The bushland located to the west of the Project Site was previously Crown Land. It is currently being transferred to DLALC under Aboriginal Land Claim 3441. Therefore, the Project Site is not adjoined by a National Park, State Forest or Crown Lands boundary.
Any site or relic of heritage, archaeological, geological or cultural significance	Minimum setback of 40m	Complies A 50m buffer is provided between disturbed areas at the Project Site and the Aboriginal archaeological items.
Top bank of a watercourse	Minimum setback of 40m,	Non-Compliance The Project's disturbance area will impact two unnamed 1st order watercourses. The Water Assessment prepared by EMM Australia (Annexure 10) notes that the resulting changes to hydrologic regimes are not anticipated to adversely impact downstream users. Furthermore, the Project's proposed Rehabilitation Strategy (Annexure 17) seeks to minimise changes to the existing catchment boundaries and runoff regimes.
Public or Community facility	Minimum setback of 10m	Complies No public or community facilities are located in the near vicinity of the proposed extractive Industry.

Residence not associated with extraction	Minimum setback of 100m	Complies A minimum setback of 100m is provided between the proposed extractive industry, including the extraction pit and site infrastructure, and the nearest residences not associated with the extractive industry.
Electricity transmission lines	In accordance with the requirements of the controlling electricity authority/ transmission corporation	Complies A buffer of approximately 50m is provided between the proposed extraction pit and the electricity transmission line adjacent to Patricia Fay Drive.

2. Transport

Access to public roads	Access points to public roads are to be controlled and limited to maintain the safety and efficiency of the public road network.	Complies A single access road is provided to the proposed development via Patricia Fay Drive. Hourly truck movements to and from the site are to be limited to maintain the surrounding road network's safety and efficiency. The Traffic Impact Assessment (TIA) prepared for the Project notes that the Project will contribute a maximum of approximately 152 two-way vehicle movements per day. The TIA's modelling demonstrates that: • The intersection of Old Northern Road/Wisemans Ferry Road will continue to operate at a Level of Service A operation in the weekday AM and PM peak hours with minimal changes to delay at the intersection with the additional traffic from the Project; and • The intersection of Wisemans Ferry Road/Patricia Fay Drive will operate at a Level of Service B operation with a small increase in vehicle delay. This represents a satisfactory to good operation.
Internal access carriageways – width	Minimum of 12m wide in accordance with established road construction standards as Illustrated in Figure 6	Complies The Project's internal access roads will be constructed with a minimum width of 12m.
Internal access carriageways – setbacks	• Minimum 10m setback from adjoining property boundary • Minimum 50m setback from environmentally sensitive areas including habitats of threatened species. • Minimum 100m setback from residences not associated with extraction	Complies The Project's proposed site access road and internal haul roads include a minimum 10m setback from adjoining property boundaries and a 100m setback from residences not associated with the extraction. A 50m buffer is provided between the proposed site access road and the threatened <i>Maroota Sands Swamp Forest</i> located north of the Project's extraction pit. This buffer zone will be subject to ongoing monitoring and weed management.

3. Water Resources

Drainage Outlets	Employ operational practices capable of maintaining and monitoring drainage outlets at downstream boundaries together with pre-existing groundwater flow and quality conditions	Complies The Project's proposed Water Management System and Rehabilitation Strategy incorporate operational practices that seek to minimise changes to the flow regimes and water quality. However, there will be impacts to the site's existing hydrological regimes, particular as dirty water will be diverted to the Project's surface water dam. A groundwater and surface monitoring program will be implemented to monitor storage and water quality.
Water flow patterns & water quality	Determine the likely impact upon groundwater and nominate an effective freeboard above wet weather high ground water level capable of conserving water flow patterns and water quality on each extraction site	Complies The EIS is accompanied by a comprehensive Water Assessment (Annexure 10). It assessed the Project's impacts on groundwater and nominated an above-wet weather high groundwater level. Section 7.4 of the EIS summarises the findings of that assessment. Groundwater modelling demonstrates that the Project will not result in a groundwater drawdown of more than 2m at nearby groundwater works. Therefore, the Project complies with the minimal impact criteria of the Aquifer Interface Policy.
Extraction	Not to occur within 2 metres of the wet weather high groundwater level or otherwise to the requirements of the Office of Environment and Heritage	Complies The Project has been designed so that extraction will not occur within 2m of the wet weather high groundwater levels.

4. Visual Amenity & Scenic Quality

Rehabilitation of Extraction Sites	Extraction sites are to be rehabilitated to a final landform capable of integrating with the physical elements and land use patterns of the local landscape.	Complies The Project's Rehabilitation Strategy is outlined in Annexure 117. That strategy seeks to rehabilitate the site to be suitable for use as productive agricultural lands. Part of the extraction pit will also be rehabilitated as a native bushland corridor. These proposed land uses complement the established rural/bushland character of the Maroota locality.
Protection of Landforms	The proposal should demonstrate that areas of high visual sensitivity such as outstanding, distinctive or diverse landforms or land cover features will be preserved and protected	Complies As outlined in the Visual Assessment (Annexure 12), there are very few viable public receptors that the proposed works would impact. Where the Project Site is visible, it has been determined that the Project will have a minor-moderate impact on the existing landscape character and values.

		The Project's Rehabilitation Strategy proposes rehabilitating a 50m native bushland corridors along the north-west periphery of the extraction pit to enhance views.
Machinery and Equipment	To be stored in buildings and structures of non-reflective materials and of a height, bulk and scale proportional to the surrounding landscape	Complies Machinery and equipment will be stored in structures of non-reflective materials and of a height, bulk and scale proportional to the surrounding landscape.
Perimeter Screen Planting	Extraction sites must provide perimeter screen planting of a sufficient height to screen views of the site from surrounding public and private places	Complies A vegetated screening buffer is retained to envelope the entirety of the Project. As noted in the Visual Assessment, this is an effective measure to mitigate the Project's visual impacts.

5. Flora & Fauna Buffer Zones

Extractive Industry Buffer Zones	- To be a minimum of 50m from important habitats of threatened species, populations, ecological communities and/or; - No less than the site-specific requirements of the National Parks & Wildlife Services. The buffer zone should not be disturbed except for ongoing management or rehabilitation purposes	Non-Compliance Due to the nature of the Project, the development will result in removing approximately 51.49ha of flora and habitat. A range of measures is proposed (see Annexure 5) to mitigate biodiversity impacts. The Project design incorporates a 50m buffer to protect the threatened <i>Maroota Sands Swap Forest</i> located north of the extraction pit. This buffer zone will be subject to ongoing monitoring and weed management. The development also incorporates a 100m biodiversity corridor along the southern boundary of the Project Site. Where impacts to ecologically sensitive areas are unavoidable, those impacts will be offset by approximately 330ha of high-quality biodiversity lands per the Project's proposed offset strategy.
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6. Heritage & Archaeological Remains

Buffer Areas	Site planning for extractive operations should provide buffer areas to conserve: - Potential Habitation Sites or sites with potential Archaeological Deposits - Archaeological sites protected under the National Parks & Wildlife Act, 1974 and as listed in the Register of Aboriginal Sites	Complies A 50m buffer is provided between disturbed areas at the Project Site and the Aboriginal archaeological items.
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	Distinct geological features	
Heritage items	Conserve and protect local, regional and state listed heritage items.	N/A The Heritage Assessment undertaken in Section 7.9 of the EIS demonstrates that no heritage items of local, regional or state significance are located within the Project site's vicinity.
7. Soils Conservation		
Clearing and extraction	Limit the extent of cleared areas at any one time by ensuring that soil surface conditions on extraction sites are protected & maintained by natural or manufactured material or mulch or by any other acceptable soil stabilisation technique	Complies A range of management measures will be implemented to protect soils surface conditions. These include: - The surface of topsoil stockpiles will be left in as coarsely structured a condition as possible in order to promote infiltration, prevent anaerobic zones forming and minimise erosion until vegetation is established. - Sampling and analysis of topsoil and subsoil resources shall be undertaken prior to resspreading. Understanding soil characteristics will assist in estimating required rates of fertiliser or ameliorants and may also assist in blending specific soil types to achieve enhanced outcomes. - Topsoil will be spread, treated with fertiliser and seeded in an integrated operation. This strategy will allow mitigation of the potential for topsoil loss to wind and water erosion.
Drainage control	Developments must ensure that drainage control measures are provided for upstream catchments from runoff that may bypass the extraction site. They should also ensure infiltration into and control runoff from the subject site. Ensure the long-term stability of natural channels downstream of the site by maintaining pre-existing rates, volumes and quality of channel flow. Protection measures may include controlled entry and exit points from sub-catchments	Complies The Project's Rehabilitation Strategy and Water Management System incorporates drainage channels to direct dirty water from the Project's disturbed area to the surface water dam. This will reduce the catchment for Watercourse A and B at the Project Site. However, the Project's Water Assessment note that this is unlikely to adversely impact downstream users.
Sediment Control	Sediment control design should include details of the proposed dewatering method for the settling volume, spillway configuration, energy dissipation and the design life of the structure	Complies Appropriate erosion and sediment control devices will be installed prior to any surface disturbance to minimise erosion potential. Erosion and sediment control devices will be designed and installed per the specifications contained in <i>Managing Urban Stormwater — Soils and Construction</i>,

<i>Volume 1, 4th edition</i> (Landcom, 2004), <i>Volume 2E Mines and Quarries</i> (DECC, 2008a).		
Wind Breaks	Ensure that wind breaks including trees, shrubs and bund walls are of a height, length, orientation, location & permeability capable of reducing wind velocity across extraction areas	Complies The Project design retains a densely vegetated buffer to envelop the extraction site. These vegetated buffers provide windbreaks capable of reducing wind across the extraction area.
Drainage Control Measures	Ensure that drainage control measures such as diversion channels or holding structures including graded banks, drains or dams are designed for a peak discharge of a 1 in 20 Annual Exceedance Probability (AEP) storm event with a minimum one metre flood freeboard margin. Ensure that sediment control dams are located downstream of wet screening plants and between tailing dams and downstream boundaries. These structures should have a sediment trapping capacity at least half the volume of the largest tailing dam. Ensure that all batters of dams and detention basins have a preferred gradient of 4H (Horizontal):1V (Vertical), which should be stabilized by vegetation or other appropriate measure. Sediment loss should be controlled by the installation of upstream diversion channels, catch drains and sediment traps along the downstream toe of the embankment. These should be maintained until vegetation cover is achieved	Complies The Project's Rehabilitation Strategy and Water Management System incorporates drainage channels to direct dirty water from the Project's disturbed area to the surface water dam. The proposed surface water management dam is located downstream of the sand processing plant. The Project does not include tailings dams. Detailed engineering drawings of the surface water dam will be prepared prior to the issuing of a construction certificate. The proposed dam will be designed and constructed per the methods in <i>Managing Urban Stormwater: Volume 1</i> (Landcom 2004) and <i>Volume 2E</i> (DECC 2008). Appropriate erosion and sediment control devices will be installed prior to any surface disturbance to minimise erosion potential. Erosion and sediment control devices will be designed and installed per the specifications contained in <i>Managing Urban Stormwater – Soils and Construction, Volume 1, 4th edition</i> (Landcom, 2004), <i>Volume 2E Mines and Quarries</i> (DECC, 2008a).
8. Acoustic Management		
Acoustic Buffer	Provide an effective acoustic buffer to residences and public places not associated with their operations	Complies A 100m vegetated buffer is located along the Project Site's southern boundary between the nearest residences and the Project disturbance area.

Noise Control	Implement effective noise control measures where noise emissions exceed maximum average background noise level	Complies A Noise Management Plan that contains the following noise control measures will be developed to guide, manage, quantify, and control the Project's noise emissions to achieve compliance with the Development Consent. - A weather monitoring system will be installed at the Project Site to identify noise enhancing weather conditions. When noise-enhancing conditions are present, and the Project's operations are predicted to result in marginal noise impacts based on the Project's stage, extraction and clearing/mulching activities will be undertaken separately. - A real-time noise monitoring terminal will be installed that is representative of the closest private receiver. Data from the real-time terminal will be transmitted to the onsite office to confirm compliance with the relevant noise criteria. - The Noise Management Plan will include a Trigger Action Response Plan to guide actions in response to a noise exceedance. Should monitoring indicate exceedances of the noise criteria, a combination of comprehensive noise mitigation treatments (i.e. noise barriers, equipment enclosures, silencers, regular equipment maintenance, etc.) and consultation with the local community will be considered on a case by case basis to manage exceedances.
Minimise Traffic Road Noise	Ensure that road traffic noise is minimised to reduce potential impacts upon the acoustic environment of residents and community facilities within the locality Proponents should indicate the special transport needs of the activity, which are most likely to generate noise outside normal operating hours	Complies The Noise and Vibration Assessment that accompanies the EIS (Annexure 9) demonstrates that Project is predicted to comply with the <i>NSW Road Noise Policy</i> Criteria.
Hours of Operation	Ensure that the hours of operation of extraction and the transportation of materials are limited to 7.00am to 6.00pm Monday to Friday inclusive, and 7.00am to 4.00pm Saturday. Variations to these hours may be	Non-compliance The proposed hours of operation are 6am to 6pm, Monday to Saturday. These hours reflect the approved hours of operation for surrounding extractive industries.

	justified having regard to the nature and location of a particular project	The Noise & Vibration Assessment confirms that the extractive industry will meet the relevant noise criteria during the sought hours of operations.
Acoustic Barriers	Signs and barriers should be installed and maintained at the point of access to ensure compliance. The barriers should be kept locked except during authorised hours of operation	Complies A barrier will be constructed at the entrance of the proposed site access road that will intersect with Patricia Fay Drive. That gate will be locked outside approved hours of operation.

9. Air Quality Management

Dust Air Pollution	Implement effective measures capable of controlling air pollution caused by dust, particularly during dry and windy weather conditions. Ensure that dust suppression equipment is fitted to all processing equipment. Employ wind activated water sprinkler systems to ensure extraction sites minimise dust generation particularly during high periods of wind and when sites are unattended. Ensure that stockpiles of material are effectively stabilised and maintained so as to prevent any dust nuisance	Complies Annexure 5 details the range of proposed dust mitigation measures. These include: - Where long-term stockpiling is planned (i.e. greater than 12 months), stockpiles will be seeded and fertilised as soon as possible. - Vehicles and plant equipment will be fitted with pollution reduction devices where practicable. - Exposed areas and stockpiles are to be covered or dampened with water as far as is practicable if dust emissions are visible, or there is potential for dust emissions outside operating hours. - Rehabilitation earthworks are to be undertaken when topsoil and subsoil stockpiles are moist and/or wind speed is below 10 m/s to minimise dust generation. - Material are to be dampened when excessively dusty during handling.
Covering of Loads (Trucks)	Prior to leaving extraction sites all laden trucks are to have their payloads fully covered by suitable material to prevent spillage from the trucks onto roads and adjoining properties	Complies All trucks laden will have their payloads fully covered before leaving the extraction site. This management measure is included in Annexure 5.
Access Roads	Ensure that access roads are sealed at the entrance to extraction sites and remaining unsealed portions of access roads are watered on a regular basis as a means of dust suppression	Complies Patricia Fay Drive, which provides access between Wisemans Ferry Road (a public road) and the Project Site, is sealed at the entrance. The Project's Internal haul roads will be regularly watered using a water cart. This management measure is included in Annexure 5.

10. Rehabilitation		
Rehabilitation – Design and Materials	Extraction sites are to be rehabilitated to a usable and stable final landform. The rehabilitation of extraction sites is to integrate with the shape, form, contour, vegetation, soil composition, drainage and land use characteristics of the surrounding terrain. The final use of land for agricultural purposes will only be considered where it can be demonstrated that the original land use was agricultural or where the adjoining land use is for agriculture. Otherwise, all sites are to be rehabilitated to bushland. Extraction areas should be progressively rehabilitated to integrate with the shape, form, contour, colour, land use, drainage characteristics, landscape quality and diversity of the pre-existing surrounding terrain, under the direction of a qualified person. Rehabilitation should commence prior to proceeding onto the next extraction area. Stockpiles of clean topsoil & overburden should be appropriately formed and shaped to ensure the viability of the soil and seed source of the site/area for later re-spreading or backfilling. Extracted areas should be backfilled only with earth and rock materials sourced as a result of extraction. No solid waste or putrescible materials are to be disposed of within the site without the prior approval of Council and other State Government agencies	Complies The Project's Rehabilitation Strategy is included as Annexure 17. The strategy complies with the DCP provisions following reasons: - Rehabilitated slopes will be constructed at a slope gradient of 1:5 (V:H) or 11.3° and hydroseeded to assist stabilisation if required. - The rehabilitated landform integrates with the site and surrounding area characteristics. - The Strategy proposes that the rehabilitated site be used as productive agricultural lands. The Strategy also incorporates a rehabilitated 50m bushland corridor at the extraction pit's north-west periphery. This land use complements existing agricultural land uses located to the north and south of the Project Site and the rural/bushland character of the Maroota locality more generally. - The Project Site will be progressively rehabilitated per the extraction and rehabilitation plans contained in Annexure 18. The Rehabilitation Strategy will include a rehabilitation schedule and monitoring program overseen by a qualified person. - Where long-term stockpiling is planned (i.e. greater than 12 months), stockpiles will be seeded and fertilised as soon as possible. - Topsoil will be stockpiled to a maximum height of 2.5m. - The surface of topsoil stockpiles will be left in as coarsely structured a condition as possible in order to promote infiltration, prevent anaerobic zones forming and minimise erosion until vegetation is established. - A maximum angle of repose of 32° will be used for overburden stockpiles on the Project Site. Overburden stockpiles will also not exceed 10m in height. - Wherever practicable, stripped material will be placed directly onto areas to be rehabilitated and spread immediately to avoid the requirement for stockpiling. - No solid waste will be disposed of in the extraction area, unless approval is provided by Council or the Department of Planning, Industry and Environment.

Rehabilitation — Planting and Maintenance	Rehabilitation should incorporate, where appropriate, endemic native plants, grass covers and species. Disturbed areas should be appropriately maintained until rehabilitation is well established. Permanent ground cover should be established on areas disturbed for more than 30 days and is to be maintained by regular watering and additional applications of seed and fertiliser. Proponents should regularly maintain rehabilitated areas having regard to the following criteria: • Replanting exposed areas & replacing dead plants within six months • Repairing erosion problems • Pest and weed control • Fertiliser applications where appropriate • Regular watering • Application of lime or gypsum to control pH and • improve soil structure, where appropriate	Complies The Project's Rehabilitation Strategy is included as Annexure 17. The following management measures that achieve compliance with the DCP provisions are included in the Strategy. • The rehabilitated 50m bushland corridor at the extraction pit's north-west periphery will be vegetated with endemic species. • Areas disturbed as part of the project will be temporarily stabilised and vegetated within a short time period of construction works to minimise dust generation, soil erosion and weed incursion until the area can be permanently rehabilitated. • Before re-spreading stockpiled topsoil, an assessment of weed infestation on stockpiles will be undertaken to determine if stockpiles require herbicide application and/or "scalping" of weed species. • Sampling and analysis of topsoil and subsoil resources will be undertaken before resspreading. Understanding soil characteristics will assist in estimating required rates of fertiliser or ameliorants and may also assist in blending specific soil types to achieve enhanced outcomes. • Topsoil will be spread, treated with fertiliser and seeded in an integrated operation. This strategy will allow mitigation of the potential for topsoil loss to wind and water erosion. • Appropriate erosion and sediment control devices will be installed prior to any surface disturbance to minimise erosion potential. Erosion and sediment control devices will be designed and installed per the specifications contained in <i>Managing Urban Stormwater — Soils and Construction, Volume 1, 4th edition</i> (Landcom, 2004), <i>Volume 2E Mines and Quarries</i> (DECC, 2008a).
Rehabilitation Bond	• Proponents will be required to pay a Rehabilitation Bond of a minimum \$3.00 per square metre. • The amount and phasing of the bond payment may vary depending upon the approved works program referred to in the Rehabilitation Strategy	N/A Under Section 11 of <i>State Environmental Planning Policy (State and Regional Development) 2011</i>, Development Control Plans (DCP) do not apply to State Significant Development. Nevertheless, an assessment of the Project against 'Part B: Section 1 — Rural Part 2: Extractive Industries' of the Hills DCP has been included in the EIS at the request of the Hills Shire Council. Therefore, the DCP requirement for the Proponent to pay a Rehabilitation Bond does not apply to the Project.

11. Community Engagement		
Community Engagement	Proposals should provide opportunities to involve the local community where possible, for example via employment and the engagement of local community groups	Complies Community and stakeholder engagement was undertaken during the preparation of the Project's Scoping Report, SEARs and EIS. Section 6 of the EIS provides an overview of the community consultation process, outlines key issues raised during consultation, and shows where in the EIS those issues have been addressed.
12 Maroota Public School		
Extractive Activities – Setbacks	Extractive Industries are to be set back at least 250m from Maroota Public School	Complies The Maroota Public School is located approximately 650m from the Project Site and 1km from the Project disturbance area.
13. Section 94 Contributions		
Developer Contributions	As a result of road damage caused by heavy vehicles extractive industry operators shall contribute to the maintenance of the regional and local road network. Proponents may be required to make developer contributions under Section 94 of the Environmental Planning & Assessment Act 1979 and in accordance with Council's Contribution Plan No.6 – Extractive Industries and shall be imposed as a condition of consent.	It is noted the Proponent may be required to make developer contributions per Section 7.11 of the <i>Environmental Planning & Assessment Act 1979</i>.
14. Environmental Management Systems		
Environmental Management	All aspects of the operation are to employ and maintain good environmental management practices. This may involve the establishment a Management Committee including at least two permanent residents not associated with the extractive operation. This management committee may provide input into the proponent company's environmental management system and details of which may be	Complies Annexure 5 contains the environmental management and monitoring measures that will be implemented at the Project Site. It outlines all the Proponents post-approval commitments, including developing a comprehensive Environmental Management System and establishing a Community Consultation Committee.

recorded in the annual Environmental Management Plan

15. Information Required for an Extractive Industries Development Application

Council requires a high standard of application, which will enable it to conduct a proper and informed environmental impact assessment of the social, economic and environmental consequences of extractive industries.

Complies

The Development Application and accompanying Environmental Impact Statement has been prepared to high-standard per Part 4, Division 4.7 of the Environmental Planning and Assessment Act 1979, Schedule 2 of the Environmental Planning and Assessment Regulations 2000, and the Project SEARs.