MITIGATION MEASURES TABLE	
APPLICATION NUMBER: SSD-70557215 – HILLVIEW HARD ROCK QUARRY	
KEY ISSUES	**MITIGATION MEASURES**
Biodiversity	A Flora and Fauna Management Plan (FFMP) will be developed following approval of the SSD application and prior to commencement that will incorporate all mitigation measures outlined in the BDAR, including timing, responsibility, and performance criteria. The FFMP will include a monitoring programme and allowance for adaptive management and response as a result of ongoing monitoring of threatened entities that could utilise the site, for which impacts are difficult to predict.
	Erosion Control: o Installation of erosion and sediment control measures prior to any works. o Regular inspection of erosion and sediment control measures, particularly following rainfall events, to ensure their ongoing functionality. o The immediate removal offsite of excavated material.
	Stockpiling: o Avoid stockpiling of materials adjacent to native vegetation, but instead use areas that are already cleared/disturbed. o Undertake maintenance of silt fences and other mitigation measures to isolate runoff.
	Dust Control: o Set maximum speed limits for all traffic within the subject land to limit dust generation. o Use a water tanker or similar to spray unpaved access tracks during the construction phase where required. o Apply dust suppressants or covers on soil stockpiles.
	Chemical Spill Control: o All chemicals must be kept in clearly marked bunded areas. o Regularly inspect vehicles, washing of vehicles or maintenance of vehicles and plant to be undertaken within 20m of natural drainage lines.
	Pre-clearing surveys are to be undertaken by a suitably qualified Project Ecologist prior to commencement of any vegetation clearing activities within the subject land. The Project Ecologist will conduct pre-clearing surveys to identify: o Resident native fauna (including threatened fauna species, where present), including nesting birds, arboreal fauna (e.g. possums, gliders, micro-bats, reptiles) occupying tree hollows and ground dwelling fauna (e.g. burrowing animals, such as wombats, bandicoots, etc.). o Fauna species likely to be encountered during construction and potential impacts to fauna during vegetation clearing. o Preferred locations to relocate fauna species and habitat features that can be retained following construction. Pre-clearing surveys will take place 1-2 weeks prior to the commencement of vegetation clearing. The Project Ecologist will mark all potential fauna habitat (e.g. habitat trees, nest trees, burrows, etc.) in the development footprint with high visibility tape (e.g. trees, large woody debris and nests) and mark their locations with a hand-held GPS.
	Vegetation Clearing Protocols: o A Project Ecologist is to be present on site during all vegetation clearing operations. o Areas of vegetation outside the development footprint are to be clearly demarcated with high visibility tape to prevent accidental clearing during the construction phase. o Vegetation should be cleared in a way that will allow fauna species living in or near the clearing site enough time to move out of the area without additional human intervention. No clearing should occur during the early evening or at night, as this is when fauna species are most likely to be on the move and are more vulnerable to injury. o Habitat links must be maintained during clearing to allow fauna species to move safely from the site to adjacent areas.

	o Clearing should begin in the area that is furthest from vegetation to be retained. o The direction of clearing should also ensure that fauna species are directed away from threats such as roads, developed areas or disturbed areas. o Sequential clearing should not create an 'island' of habitat that is isolated from adjoining habitat by roads or cleared and disturbed areas.
	Habitat trees shall be carefully felled under the supervision of the Project Ecologist, following best practice guidelines including: o All habitat trees to be cleared are to be surveyed and marked with high visibility tape prior to clearing. o Clearing should be undertaken in the Spring period to facilitate survival of displaced animals. o Habitat trees are to be mechanically shaken or agitated prior to felling to encourage any remaining animals to either leave the tree or show themselves and subsequently be removed by the Project Ecologist prior to felling. o Felling will involve gently pushing the tree and lowering or felling using a forestry harvester to avoid sudden falling as this is likely to injure wildlife. o Following felling, habitat trees will be systematically checked from the ground by the Project Ecologist for any remaining fauna. o Felled habitat trees will be left overnight (i.e. in an adjacent habitat area if required) to allow any undetected fauna further opportunity to escape. o If any hollow-bearing tree is found or suspected to contain any threatened species, the tree should be left in place for a minimum of two days and, if possible, be reinspected no more than two hours prior to felling.
	Management of displaced fauna: o All handling of fauna species should be conducted by the Project Ecologist. o In the event that arboreal animals do not move, or they cannot be captured because the tree hollow to be removed is too large, too high or its recovery would breach OH&S requirements then the tree will be felled (i.e. in the direction of other tree debris if possible) and animals recovered and relocated to suitable adjacent habitat. o Animals are to be removed and relocated to the adjacent bushland/nest boxes within the Western Offset Area prior to felling or the tree shall be sectioned and dismantled under the supervision of the Project Ecologist before relocating the animals. o Nocturnal fauna species, such as microbats, are to be 'soft released' using bat boxes placed in adjacent habitat. o Nocturnal fauna species, such as gliders and possums, are to be secured in suitable enclosures and kept in a quiet, dark and cool environment until they can be released into suitable habitat after dark. o If any injured fauna species are found during the construction period, construction must stop immediately so that the injured animal can be taken to a vet or wildlife carer.
	Several weed species, including High Threat Weeds, were identified within the subject land. Accordingly, measures to prevent the spread of weeds should include the following hygiene procedures: o Induction materials containing detailed information pertaining to the identification of high threat weeds should be prepared by a suitably trained ecologist or bush regenerator. These materials should be provided to contractors who will carry out construction works within the subject land. o All vehicles, equipment, footwear and clothing should be clean and free of weed propagules prior to entering the subject land. o Any weeds that are removed during the construction phase should be disposed of via an appropriate waste facility.

	A monitoring program will be included in the FFMP that will provide for surveillance of threatened entities within retained bushland adjoining the subject land, including: o Dry rainforest patch located north of the subject land (PCT 3076), which represents Lower Hunter Dry Rainforest VEC, and could be subject to indirect impacts and prescribed impacts (see Section 8.4 and Section 8.5.2). o Riparian vegetation along Double Creek (PCT 3436 and 3074), which represents River-flat Foerst EEC and could be subject to indirect impacts and prescribed impacts (see Section 8.4 and Section 8.5.2) o Vehicle strikes on mobile threatened fauna (see Section 8.5). The monitoring program will include: o Passive surveillance of fauna (e.g. using infra-red cameras). o Records of fauna sightings from site staff. o Vegetation monitoring via establishment of permanent plots (using the Ecological Monitoring Method, or EMM) at selected locations within retained vegetation adjacent to the subject land. o Inspections of fauna habitats, including features relocated during site establishment, fauna crossing structures, nest boxes and other features.
	Time works to avoid critical life cycle events such as breeding or nursing.
	Implement clearing protocols (including pre-clearing surveys, daily surveys and staged clearing) and utilise trained ecologists or licensed wildlife handlers during clearing events.
	Relocate habitat features (e.g. fallen timber, hollow logs) from the development or clearing site to adjacent retained vegetation.
	Implement clearing protocols that identify vegetation to be retained, prevent inadvertent damage and reduce soil disturbance.
	Utilise adaptive dust management and monitoring programs to control air quality.
	Schedule the timing of construction activities to avoid impacts (e.g. timing the construction for when migratory species are not at the site, or when particular species are not at the site, or when particular species known to, or likely to use the habitat on the site, are not breeding or nesting).
	Erect temporary fencing to protect significant environmental features, such as native vegetation and riparian zones.
	Use hygiene protocols to prevent the spread of weeds or pathogens between infected and uninfected areas.
	Train staff and conduct site briefings to communicate environmental features to be protected and measures to be implemented.
	Prepare a vegetation management plan to regulate activity in vegetation and habitats adjacent to residential developments.
	Provide for the ecological restoration, rehabilitation and/or ongoing maintenance of retained native vegetation habitat on, or adjacent to, the development or clearing site.
	Install nestboxes within suitable host trees within areas of retained native vegetation onsite to replace tree hollows removed.
	Undertake ecological pre-clearance surveys of native vegetations areas.
	Vegetation clearing is to be staged (e.g. only one hectare is cleared at a time and allowing one week between clearing each hectare).
	No clearing should occur during the early evening or at night, when nocturnal fauna species are most likely to be active. The direction of clearing should also ensure that fauna species are directed away from threats such as roads, developed areas or disturbed areas (e.g. clearing direction from road at west end of site to vegetation at east end of the subject land.
	Supervision of tree felling – the project ecologist or licensed wildlife handler is to be onsite during all native vegetation clearance.

	Pre-clearance surveys of vegetation within the subject land is to identify suitable habitat features for salvage (e.g. tree hollows, nests, fallen timber or hollow logs).
	Relocate and place salvaged habitat features into retained bushland on the subject land.
	Identify and mark areas of vegetation to be retained outside of the subject land with temporary chain mesh fencing lined with sediment fencing.
	Set maximum speed limits for all traffic within the subject land to limit dust generation.
	Utilise water tankers and spray unpaved access tracks during the construction phase where required.
	Apply dust suppressants or covers on soil stockpiles.
	Conduct pre-clearing surveys of retained native vegetation for evidence of breeding/nesting.
	Temporary fencing – areas of vegetation outside of the subject land are to be clearly demarcated with temporary chain mesh fencing to prevent accidental clearing during the construction phase.
	Weed management – all vehicles, equipment, footwear and clothing should be clean and free of weed propagules prior to entering the construction site. Construct a truck wheel wash at the site entrance.
	Any weeds removed during the construction phase should be disposed of appropriately.
	Onsite briefings – sensitive environmental areas (i.e. retained vegetation) are to be identified and communicated to quarry staff (and contractors) prior to starting work.
	A Flora and Fauna Management Plan is to be implemented for retained vegetation within the site.
	A Vegetation Management Plan is to be implement to ensure weed removal and planting works over a minimum of 3 years. The VMP will aim to monitor retained vegetation against benchmark values (refer BioNet Vegetation Classification).
	Conduct annual inspections of nest boxes installed with trees within the site.
	Install artificial connectivity measures (e.g. glider poles, rope crossings, habitat bridges) to re-establish connections between habitat and favoured transport corridors.
	Erect temporary fencing to protect significant environmental features, such as karst, caves, rock outcrops and water bodies.
	Use sediment barriers or sedimentation ponds to control the quality of water released from the site into the receiving environment.
	Train staff and conduct site briefings to communicate environmental features to be protected and measures to be implemented to protect them.
	Implement monitoring of retained TEC vegetation to ensure no long-term decline in ecosystem processes and condition, within Lower Hunter Dry Rainforest VEC and Riverflat Forest EEC. Include performance criteria and TARP in FFMP.
	An ecologist is to be present during dam de-watering activities.
	Monitoring of fauna movements through potential corridors is to be conducted.
	A Rehabilitation Management Plan (RMP) will also be prepared to guide the staged soil management and planting of disturbed areas over the life of the project

Noise and Blasting	Works will be carried out over the standard construction hours.
	Noise impacts are to be minimised. Community consultation would be ongoing for residences within close proximity to the works. The information would include details of the proposed works with the duration and nature of the works during construction.
	Alternatives to reversing alarms: o Avoid use of reversing alarms by designing site layout to avoid reversing. o Where reasonable and feasible, install less alternative typical 'beeper' alarms, whilst taking into account the requirements of the OHS legislation.
	Plan traffic flow, parking, and loading/unloading areas to minimise reversing movements within the site.
	Examine and implement (where feasible) alternative work practices and equipment use which would generate less noise, such as the use of electrical equipment instead of diesel or petrol powered equipment.
	Turn off plant and equipment when not in use.
	Ensure plant/equipment is regularly maintained and repair or replace equipment that becomes noisy.
	Equipment to be fitted with appropriate silencers and be in good working order.
	Communicate with construction workers (toolbox talks) about minimising noise and the potential to impact residents through their actions, including the use of equipment, use of radios during non-standard hours, avoiding shouting, minimal talking loudly and restrict the slamming or vehicles doors.
	Where noise is above the Highly Noise Affected 75 dB(A) the works may require respite periods by restricting the hours that the very noisy activities can occur, taking into account – times identified by the community when they are less sensitive to noise (such as mid mornings or mid-afternoons for work near residents), if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
	Minimise the duration of concurrent plant/machinery operating which could lead to exceedances in the Highly Noise Affected Level.
	Management Measures: o Any project specific mitigation measures identified in the environmental impacts assessment documentation or approval or licence conditions must be implemented. o Community consultation measures include: - Community based forums periodic notification (monthly letterbox drop or advertisement in papers); - Project info-line and construction response line; - Email distribution list; - Signage; - Specific notifications – letterbox dropped or hand delivered to the identified stakeholder a week before events. Used to support periodic notifications, or to advertise unscheduled work; - Phone calls; - Individual briefings; - Project specific respite offers; - Alternative accommodation options. o All employees, contractors and subcontractors are to receive an environmental induction at least including: - All relevant project specific and standard noise and vibration mitigation measures; - Relevant licence and approval conditions; - Permissible hours of work;

	- Any limitations on high noise generating activities; - Location of nearest sensitive receivers; - Construction employee parking areas; - Designated loading/unloading areas and procedures; - Site opening/closing times (including deliveries); - Environmental incident procedures. o No swearing or unnecessary shouting or loud stereos/radios on site. No dropping of materials from height, throwing of metal items and doors slams. o A noise monitoring program is to be carried out for the duration of the work where required by the Construction Noise and Vibration Management Plan and any approval and licence conditions.
	Source Controls: o Where feasible and reasonable, limit construction to only the standard daytime working hours or even daylight hours. o Work generating high noise and/or vibration levels should be scheduled during less sensitive time periods. In conjunction with implementing respite periods with low noise/vibration-producing construction activities. o Where possible, concentrate noisy activities at one location and move to another as quickly as possible. o High noise and/or vibration generating activities may only be carried out in continuous blocks, not exceeding three hours each, with a minimum respite period of one hour between each block. o Use quieter and less vibration emitting construction plant, equipment and methods where feasible and reasonable. o Use only necessarily sized and power rated plant items required. Ensure equipment has quality mufflers installed. o Limit the operational noise levels of plant and equipment Sound Power Levels to be compliant with the noise emission limits used in the site Construction Noise and Vibration Management Plan (CNVMP). Noise emission limits should guide choice of any rental plant items. Implement a noise monitoring audit program to ensure equipment remains within specified limits. o Only have necessary equipment on site. Simultaneous operation of noisy plant within discernible range of a sensitive receiver is to be avoided. Maximise the offset distance between noisy plant and nearby sensitive receivers. Plant used intermittently to be throttled down or shut down when not in use. The loudest noise-emitting side of plant items should be orientated away from sensitive receivers. o Plan traffic flow, parking, and loading/unloading areas to minimise reversing movements within the site. o Consider the use of non-tonal reversing beepers (or an equivalent mechanism such as broadband alarms) fitted and used on construction vehicles and mobile plant regularly used on site. Other alternatives include manually adjustable or ambient noise sensitive types (“smart” reversing alarms) and closed-circuit TV systems. o Incorporate the following recommendations as part of the project Traffic Management Plan: - Loading and unloading of materials/deliveries is to occur as far as possible from sensitive receivers; - Dedicated loading/unloading areas to be shielded if close to sensitive receivers; - Delivery vehicles to be fitted with straps rather than chains for unloading, wherever possible. o Incorporate the following recommendations as part of the project Traffic Management Plan: - Vehicle movements outside construction hours, including loading and unloading operations, should be minimised, and avoided where possible; - The development site should be laid out so there is direct flow of mobile plant through the site to minimise or preclude, if possible, any required reversing. o Ensure equipment is well maintained and fitted with adequately maintained silencers which meet the design specifications.

	o Implement worksite induction training, educating staff on noise sensitive issues and the need to make as little noise as possible.
	Path Controls: o Consider installing temporary construction noise barriers. Install any permanent noise barriers required to minimise road traffic noise as early as possible in the construction process. Locate equipment to take advantage of the noise barriers provided by existing site features and structures, such as embankments, storage sheds and fences. Consider site topography and line of sight when situating plant. o Install noise-control kits for noisy mobile equipment and shrouds around stationary plant, as necessary, while ensuring WHS of workers is maintained (refer AS2436). o Locate noisy plant as far away from noise-sensitive receptors as possible.
	Receptor Controls: o Community consultation, information, participation, and complaint responses are essential aspects of all construction noise management programs. They typically involve: - A community information program before construction and/or high-risk activities are started. This usually involves a leaflet distribution and direct discussions and negotiations with affected residents, explaining the type, time, and duration of expected noise emissions; - The involvement of affected residents in the development of acceptable noise management strategies; - A nominated community liaison officer with a contact telephone number; - A complaints hotline; - Timely responses to complaints, providing information on planned actions and progress towards the resolution of concerns.
	Stage 4a: Northern haul road and RL105m RoM Pad development: o It is recommended that development works associated with the construction of the RL105m RoM pad are limited to the day period (7am to 6pm). Predicted Stage 4a emitted noise levels to sensitive receivers adjacent to the development indicate compliance once dozer operations associated with development activities at the RL 105m RoM pad are restricted to day period operations only.
	Stage 5a: Development of Box Cut and Extraction at RL 206m: o The evening and night period noise goals can be achieved if blast preparation (drilling and dozer) is restricted to the day period. That is, only extraction of blasted material, haulage to the RoM pad and processing occurring after 6pm.
	Stage 5b: Extraction at RL 195m following initial quarry development: o The evening and night period PNTL can be achieved if blast preparation is restricted to the day period. That is, only extraction of blast material, haulage to the RoM and processing occurring after 6pm.
	Stage 6: Extraction from RL 158m to RL 126m and Progressive Final Landform Works o The evening and night period PNTL can be achieved when blast preparation (drilling) and progressive final landforms works (dozer operations) at exposed locations are restricted to the day period. That is, only extraction of blasted material, haulage to the RoM and processing occurring after 6pm.
	Stage 7: Extraction down to RL95m and final landform: o Given the uncertainty relating to the design of the mine plan and details relating to the operation of processing plant and RoM areas once mining of the RL 105m RoM pad commences, it is recommended that specific amendments to the Noise Management Plan (NMP) for the site be developed and implemented following commencement of Stage 7, but prior to mining through of the RL 105m RoM pad. Mitigation and management actions specific to the issue may include: - Monitoring and/or review of noise complaints to ascertain whether minor exceedance of the PMTL may result in

	material impact at receivers R18 and R19; - Consideration of temporary noise barriers to minimise emission of noise from the processing plant; - Commitment to carry out processing activities only during the day period (as modelling indicates that the PNTL is achieved at this time).
	Blasting: o Reduce the maximum instantaneous charge and use of appropriate delays; o Establish blast times in accordance with prevailing meteorological conditions; o Optimise blast design. o Orientate blasts away from receivers (where possible). o Notify neighbours of planned blasts and monitoring of overpressure and ground vibration of blasts as they occur.
Air Quality	An Air Quality Management Plan (AQMP) is to be prepared to ensure effective management and measurement of particulate emissions.
	Dust monitoring near impacted sensitive receptors, in conjunction with reactive management of adverse dust levels by site management must be conducted. The existing monitoring network and capabilities should be expanded to include monitoring of the dust fractions that may result in health-related impacts (from the inhalation of fine particulates), e.g. PM_{10} and at the locations where exceedances occurred in air quality assessment modelling, which are: o Receptor R12: 2035 The Bucketts Way; o Receptor R19: 29B Booral-Washpool Road; o Receptor R20: 400 Washpool Creek Road.
	Enforce a maximum speed of 40km/h on unsealed haul and internal roads.
	Apply water sprays on trafficable areas (approximate rate 2 $L/m^2/h$) as required during normal operations.
	Increase water sprays (greater than rate 2 $L/m^2/h$) during periods of peak export to roads.
	Apply water sprays or other suitable alternatives on processing plant and equipment to maintain material in a moistened state.
	Investigate additional dust controls on equipment, and for the machinery not shown to contribute the highest portions of dust (e.g. excavators).
	Route Planning should include: o Choice of route which avoids constant uphill and downhill driving or city driving with many stops and starts which may increase fuel consumption by more than 50%. o Avoidance of driving into a headwind as an additional 10m/s may increase fuel consumption by 18%. o Choice of roads with reduced rolling surfaces as increased rolling resistance may increase fuel consumption by 10-20%. o Avoidance of additional stops: A stop very 10km increases fuel consumption by approximately 35%. o The use of GPS may improve choice of route to ensure the most direct and efficient route is chosen.
	Reduction of Scope 1 GHG Emissions: o Review energy usage equipment – consideration should be given to the lifecycle cost advantages of using energy efficient equipment. o Review operational initiatives such as turning off idle equipment and workshop/office appliances. o Review settings of air conditioning equipment if appropriate in office building. o Review the us of automatic lighting in amenity and meeting rooms.

Water – Surface	The proponent is to secure adequate WSP licence allocations for groundwater source zones predicted to experience water take.
	An Erosion and Sediment Control Plan (ESCP) will be prepared as part of the site Construction Environmental Management Plan (CEMP). The ESCP and CEMP will prescribe requirements for: o Physical mitigation measures as outlined within Section 8 of the Surface Water Assessment by SLR. o Water quality in the sediment basin will be tested following rainfall and prior to release from site, and treated to achieve the required water quality. o Inspection of ESC measures following heavy rainfall. o Water quality monitoring and reporting requirements. o Providing an appropriate level of resourcing for environmental management and monitoring.
	A Water Management Plan (WMP) will prescribe requirements for: o Monitoring and reporting of surface water quality in accordance with the EPL. o Monitoring and treatment of water quality in sediment basin prior to release from site, and treated to achieve the required water quality.
	The following requirements will be captured in C CEMP during the construction phase and a WMP during the quarrying operations: o Fuel tanks – diesel tanks must not be located proximate to watercourses or overland flow paths. All fuel storage tanks must be located within a bund or be self-bunded tanks. o Hazardous materials – hazardous materials and equipment will be stored in accordance with Australian Standard AS/NZS 4452:1997, in bunded areas under roof and located away from watercourses. o Spillage – spill kits will be kept on site, and staff trained in their use. o Spill Management Plan – during construction and operations, the site will have a Spill Management Plan (SMP) which details the emergency response and reporting requirements in the event of a spill.
Water – Groundwater	Acquire a Water Access Licence to cover the inflow from the Myall Volcanics.
	A Dewatering Management Plan (DMP) will be prepared outlining responsibilities, controls and procedures to mitigate potential environmental impacts with operational dewatering.
	A Water Management Plan (WMP) with Groundwater Management Plan (GWMP) appendix will be created prior to operation to provide appropriate mitigation for the groundwater environment and to prevent significant adverse impacts.
	Develop and implement an Environmental Management Plan (EMP) to sufficiently manage the risk of water quality impacts, including mobilisation of contaminants, accidental spills, disturbance of sediment and/or stormwater mismanagement during the construction/operational and rehabilitation phase of the project, such that there is negligible impact to water quality. The EMP will include appropriate sub-plans for Soil and Water Management and Stormwater and Erosion Control Management. These sub-plans will identify all reasonably foreseeable risks relating water pollution, soil erosion and stormwater pollution, soil erosion and stormwater pollution associated with the project; describe how these risks will be managed and minimized during construction, and include arrangements for managing pollution risks associated with contamination, spillage, soil erosion and stormwater management within the vicinity of the Project.

Heritage	General – The persons responsible for the management of onsite works will ensure that all staff, contractors and others involved in construction and maintenance related activities are made aware of the statutory legislation protecting sites and places of significance. Of particular importance is the National Parks and Wildlife Regulation 2019, under the National Parks and Wildlife Act 1974.
	An Unexpected Finds Procedure for cultural materials and human remains (Appendix C) will be implemented during all works.
	Should any Aboriginal objects be uncovered during works; all work will cease in that location immediately and the Unexpected Finds Procedure followed and the Environmental Line contacted.
Traffic and Transport	It is recommended that regular understorey trimming of trees located within the road reserve occurs to ensure unobstructed sight lines are provided.
Land Resources	Appropriate erosion and sediment control measures are recommended for the whole site.
	A Flora and Fauna Management Plan (FFMP) will be developed following approval of the SSD application and prior to commencement that will incorporate all mitigation measures outlined in the BDAR, including timing, responsibility, and performance criteria
	Develop and implement an Environmental Management Plan (EMP) to sufficiently manage the risk of water quality impacts, including mobilisation of contaminants, accidental spills, disturbance of sediment and/or stormwater mismanagement during the construction/operational and rehabilitation phase of the project, such that there is negligible impact to water quality.
	Vegetation clearing protocols are to be implemented.
	Sheild mobile equipment behind the active edge of the processing pad (where possible).
	Retain vegetation around disturbance area and along road frontages
	Maintain the site in a clean and tidy condition.
Waste Management	Waste streams will be classified and managed in accordance with the principles of the waste management hierarchy and EPA guidelines.
	All waste or redundant materials generated by the project would be reused or recycled where feasible and reasonable.
	All wastes will be stored in appropriate containers/receptacles that are lidded where practical, within designated waste storage areas.
	All wastes will be collected for reuse/recycling/disposal by appropriately licensed waste contractors.
	Transport of wastes to recycling or waste disposal facilities would be undertaken by appropriately licensed waste contractors.
	Overburden would be re-used at the site for fill or bunding or will be stored at the site for reuse during rehabilitation.
	Any waste oils, greases and lubricants would be stored in designated drums prior to their removal for recycling or disposal.
	Any soils contaminated through fuel or chemical spills would be excavated and transported to a licensed waste facility and the resulting excavation would be filled with suitable clean soil.
	Any weed species that area cleared for the proposal would be disposed of at a licensed green waste disposal facility or landfill.
	General wastes will be segregated into recyclable and on-recyclable streams through the provisions of appropriate split receptacles bins.
	Site inductions for employees and contractors will include waste management information.
	Appropriate signage will be provided at all waste storage areas to clearly identify waste segregation and recycling procedures.

	This WMP will be retained on-site during the excavation and construction phases of the development, along with other waste management documentation (e.g. contracts with waste service providers). Responsibility for the WMP, waste documentation and processes during the excavation and construction phases will be with the site manager or builder. A logbook that records waste management and collection will be maintained on site, with entries including: o Time and date of collections; o Description of waste and quantity; o Waste/processing facility that will receive the waste; and o Vehicle registration and company name.
Hazards – Bushfire	Land within a radius of not less than 50m around the office and weighbridge structures is to be established and maintained as an Asset Protection Zone (APZ).
	The APZ is to be maintained in accordance with the requirements for an Inner Protection Area (IPA) as described in Appendix 4 of Planning for Bushfire Protection 2019. When established and maintaining an IPA the following requirements apply: o Tree canopy cover should be less than 15% at maturity; o Trees at maturity should not touch overhang the building; o Lower limbs should be removed up to a height of 2m above the ground; o Tree canopies should be separated by 2m to 5m; o Preference should be given to smooth-barked and evergreen trees; o Large discontinuities or gaps in vegetation should be provided to slow down or break the progress of fire towards buildings; o Shrubs should not be located under trees; o Shrubs should not form more than 10% ground cover; o Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation; o Grass should be kept mowed (as a guide, grass should be kept to no more than 100mm in height), and; o Leaves and vegetation debris should be removed.
	Construction of the office and any other buildings/structures proposed on the land is to be wholly non-combustible construction.
	A Bushfire Management Plan (BMP) is to be prepared and implemented prior to the commencement of works on the proposed development.
	A Bushfire Emergency Management and Evacuation Plan (BEMEP) is to be prepared and implemented prior to the commissioning of the proposed hard rock quarry. The BEMEP is to be prepared consistent with the NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan. A copy of the BEMEP is to be provided to the Local Emergency Management Committee for its information prior to commissioning of the development.

Hazards – Hazardous and Offensive Development	As explosives will be transported to site for use (but not stored) the Department of Planning, Housing and Infrastructure should be consulted for advice. This advice may also include information included within the specialist advice reports (i.e. noise, air quality and emissions).
	The dangerous goods shall be stored in a manner which complies with the applicable storage standards and regulations (i.e. AS/NZS 3833:2007 – The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers, AS 1940-2017 – the storage and handling of flammable and combustible liquids, AS 3780:2023 – Storage and handling of corrosive substances, NOHSC:2017(2001) – National Code of Practice for the Storage and Handling of Workplace Dangerous Goods).
	The documentation required by the Work Health and Safety Regulation 2017, applicable to the site dangerous goods storage(s), shall be prepared for the site prior to occupation.
	Review of the dangerous good storage design against applicable Australian Standards to ensure that the risks posed have been managed 'So Far As Is Reasonably Practicable (SFARP).
	Where flammable gases or liquids are stored, a hazardous area classification in accordance with AS/NZS 60079.10.1:2002 – Explosive atmospheres Classification of areas – Explosive gas atmospheres, shall be prepared to ensure that an ignition source does not enter a hazardous atmosphere as required by the WHS Regulations.
Visual	To the greatest extent practicable, the site will be quarried in a manner that enables mobile equipment to remain shielded behind the active edge of the processing pad.
	Vegetated areas will be retained around the disturbance area and along road frontages.
	Lighting will be directed downwards and away from residential dwellings and public roads in accordance with relevant Australian Standards (AS4282 – Control of the Obtrusive Effects of Outdoor Lighting).
	The site will always be maintained in a clean and tidy condition.
Social and Economic	Ongoing Community Engagement: The applicant should develop and implement community/stakeholder engagement plans and structures during all stages of the proposed development. During the development/construction stage, it is recommended that provision for keeping immediate land occupants advised on activity can be included in a more general management plan for these works. This may need to be extended to include other part of the community with respect to any planned disruptions during work on the Maytoms Land/The Bucketts Way intersection.
	Complaints Handling Mechanism: The engagement structure should also include the mechanism for the receipt, management and resolution (where possible) of complaints from the public.
	Community Consultative Committee: During the operational life of the quarry, the applicant may consider the establishment of a Community Consultative Committee (CCC) as an effective structure for regular, formal engagement with the community. Should it be determined that a CCC should be established for the quarry, it is recommended that an independent chair be appointed, as the arbiter of the CCC's charter/rules of operation.
	Recommendations of Technical Reports: To the extent that they may contribute to avoidance, minimisation or mitigation of social impacts, the recommendations proposed in specialist technical reports forming parts of the EIS are endorsed. These should be implemented as recommended by the respective technical specialists.
	Economic: o Where feasible, employ a locally and/or regionally based workforce. o Endeavour to conduct procurement activity within NSW. o Voluntary contributions to the local community, should be undertaken in consultation with relevant community

	representatives, to ensure community value is maximised.
Rehabilitation	A Rehabilitation Management Plan will be developed prior to the commencement of operations, consistent with relevant guidelines and in compliance with the required rehabilitation outcomes outlined within conditions of the development consent.
	Opportunities to implement progressive rehabilitation will be identified as part of annual rehabilitation planning processes.
	Prior to the commencement of operations, or as required by the conditions of consent, the proponent will develop a Conceptual Closure Plan (CCP). The CPP will incorporate a detailed Final Land Use Options Assessment of the PFLU and other final land use options. The CCP and final land uses will be progressively refined during the life of the operation.
	The rehabilitation and disturbance schedule for implementation will be incorporated into the RMP and reviewed annually.
	Detailed rehabilitation methodologies will be documented within the RMP and site procedures prior to the commencement of operations.
	A Ground Disturbance Permit (GDP) process will be established and implemented for all ground disturbance works within the Project Approval boundary in accordance with the GDP Procedure. All clearing activities will be undertaken in accordance with the site approval conditions, site management plans/standards and the conditions contained in the GDP. All works are to be undertaken in an environmentally responsible manner to ensure the conservation of the natural environment as far as practicable.
	Prior to clearance activities commencing as part of the GDP process, suitably qualified personnel would conduct a fauna survey to minimise the risk of any resident fauna becoming displaced or injured. Additionally, the presence of a trained ecological or licensed wildlife handler would be maintained during native vegetation clearance and clearance of rock areas.
	A rehabilitation monitoring program will be undertaken in accordance with best practice standards. Early intervention and adaptive management to minimise the potential for rehabilitation failure will be implemented. The RMP developed for the project will include a rehabilitation Trigger Action Response Plan (TARP).
	A rehabilitation quality assurance process (RQAP) will be developed and incorporated into the RMP. The RQAP will be implemented through every phase of rehabilitation. The RQAP will also include an inspection protocol to ensure that each phase of decommissioning and rehabilitation has been completed.