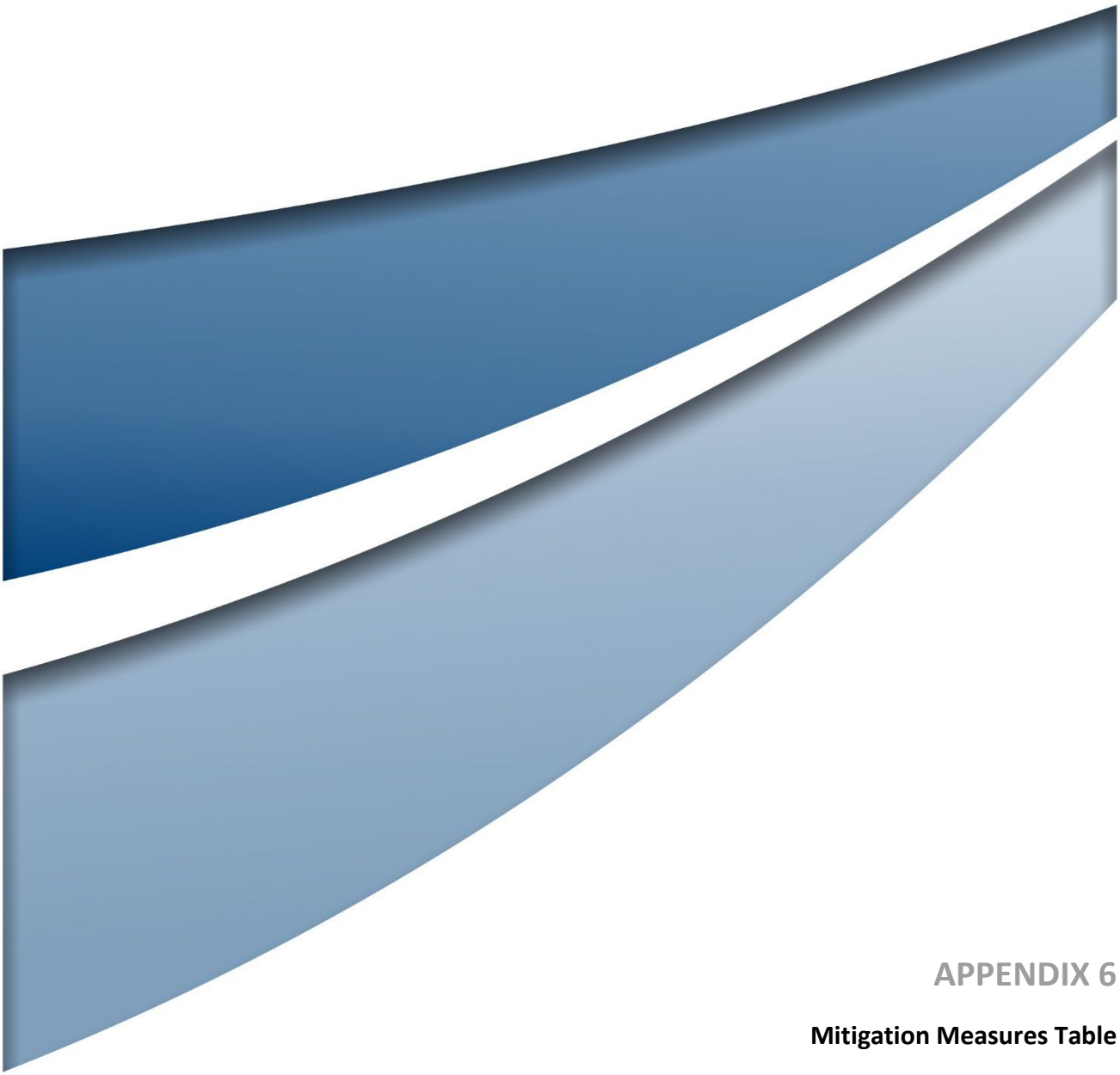

APPENDIX 6

Mitigation Measures Table

This report has been prepared for Richmond Valley Solar & BESS Pty Ltd (ABN 43 672 993 869) a wholly owned special purpose vehicle of Ark Energy Projects Pty Ltd and the Proponent of the Project. Richmond Valley Solar & BESS Pty Ltd will herein be referred to as Ark Energy or Ark Energy Projects.

Appendix 6 – Mitigation Measures Table

Ark Energy will be responsible for implementing the management and mitigation measures identified in the EIS. The management and mitigation measures will be implemented through a CEMP an OEMP and supplementary management and construction plans. These plans will be prior to each stage of the Project by Ark and the relevant contractor, and in consultation with relevant Government Agencies. **Table 1** below provides a consolidated list of the management and mitigation measures applicable to the Project and relevant timing for implementation.

Table 1 Summary of Mitigation and Management Measures

Issue	ID	Mitigation and Management Measure	Phase
Social	S-01	An Accommodation, Employment and Procurement Strategy (AEPS) will be developed prior to construction that will: • Provide mechanisms to prioritise local employment with a focus on those with the requisite skill types who are currently unemployed. • Provide details regarding existing accommodation providers, including temporary accommodation providers and manufacturers. • Maintain an accommodation register for accommodation providers to register their interest in leasing their accommodation for use by the Project workforce.	Pre-construction
	S-02	Host Landholder agreements to include reference to decommissioning obligations.	Pre-construction
	S-03	Any neighbour agreements to address the concerns of the landholder on a case by case basis.	Pre-construction
	S-04	Continue to apply the CSEP as detailed in Section 5.2 of the SIA. The CSEP will: • Include consistent, transparent and proactive information provision and mechanisms for consultation with stakeholders throughout Project development. • Be updated to adapt to the changing needs of the community and engagement intentions across each phase of the Project. • Be updated in partnership with local community stakeholder and economic partners. • Have mechanisms and guidance for providing Project updates at key Project milestones. • Facilitate ongoing communication with host and proximal landholders to provide project updates, feedback and to identify construction access points and enable landholders to effectively plan stock movements and farming activities.	Throughout

Issue	ID	Mitigation and Management Measure	Phase
	S-05	Implement a Community Benefit Fund (CBF) in consultation with RVC. The CBF will have a value $850/MW installed/year over the lifetime of the project.	Throughout
	S-06	Continue collaboration with the community, community service providers and other proximal renewable energy developers to understand evolving needs and to ensure coordination in community investment opportunities beyond the CBF.	Throughout
	S-07	Prior to communicating with stakeholders, consider consultation fatigue in light of stakeholder communication from nearby renewable energy projects.	Throughout

Bushfire	B-01	Prior to commencing construction, a Fire Safety Study will be developed in consultation with FRNSW. The study will:
		• be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 2 'Fire Safety Study' guideline;
		• describe the final design of the battery storage facility;
		• include reasonable worst-case bush fire scenario to and from the battery storage and the associated bush fire management; and
		• identify measures to eliminate the expansion of any fire incident including:
		  ○ adequate fire safety systems and appropriate water supply;
		  ○ separation and / or compartmentalisation of battery units; and
		  ○ strategies and incident control measures specific to the battery storage design.
			Pre-construction

	B-02	The Project will be designed in compliance in accordance with PBP and the Australian Standards for Construction of Buildings in Bushfire Prone Areas (AS3959). The Project will be constructed in accordance with Australian Building standards to ensure electrical equipment is not installed incorrectly resulting in an ignition site. The Development Footprint will be maintained to the standard of an Inner Protection Area (IPA) in accordance with the NSW RFS Standards for Asset Protection Zones and Appendix 4 of PBP.	Pre-construction
	B-03	The ERP will be in place prior to the commencement of construction and will contain measures to manage bushfire risk in accordance with the NSW Rural Fire Service Guide to Developing A Bushfire Emergency Management Plan (NSW RFS, 2014). The plan will: • outline the strategies to exclude workers to the effect of potential bushfire attack • eliminating workforce exposure to bushfire threat • identify management systems to forecast bushfire threat • provide the Project will the optimal evacuation route from site.	Pre-construction

Issue	ID	Mitigation and Management Measure	Phase
	B-04	Bush fire emergency management and operations strategies will be contained within the ERP and will be delivered post approval, addressing fire prevention measures, equipment availability, and appropriate emergency planning.	Pre-construction
	B-05	In accordance with the *Rural Fires Act 1997* – Section 99, total restriction of hot works on any day declared to be a Total Fire Ban (TOBAN) will be applied to the Project to address the potential impacts associated with onsite ignition. Essential works may be completed during a TOBAN if works are compliant with the Hot Work and Fire Risk Work procedure and any exemption provided by the NSW RFS.	Construction
	B-06	The Development Footprint will be appropriately maintained over the life of the Project and all vegetation maintenance and management will be undertaken in accordance with relevant requirements set out in the proposed Bushfire Management Plan.	Operation
	B-07	An appropriate dedicated water supply for bushfire protection will be provided. Water supply for the Project would likely be sourced from commercial suppliers in the nearby region (via water trucks), rain water collected from onsite rainwater tanks (at O&M facility) and farm dams within the Project Area (subject to availability).	Throughout
Water	WT-01	• Water sources for the construction of the Project will be confirmed during the detailed design phase and in consultation with suppliers and landholders and be subject to availability.	Pre-construction
	WT-02	• The presence and current conditions of 3rd and 4th order stream waterways within the Project Area will be verified and where feasible, 40 buffers will be applied in accordance with DPI Guidelines for Controlled Activities on Waterfront Land (2018) and Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI, 2003).	Pre-construction
	WT-03	A Construction Soil and Water Management Plan (CSWMP) will be included within as a part of the CEMP and be prepared to outline measures to manage soil and water impacts associated with the construction works, including contaminated land. The CSWMP will provide: • Measures to minimise/manage erosion and sediment transport both within the construction footprint and offsite including requirements for the preparation of erosion and sediment control plans (ESCP) for all progressive stages of construction, measures to manage waste including the classification and handling of spoil. • Procedures to manage unexpected, contaminated finds. • Measures to manage stockpiles including locations, separation of waste types, sediment controls and stabilisation. • Measures to manage accidental spills including the requirement to maintain materials such as spill kits. • Measures and methods to describe the dewatering procedure in the event that the construction activities interact with the ground water. • Establish responsibilities and water requirements.	Construction

Issue	ID	Mitigation and Management Measure	Phase

		• Establish surface water quantity and quality reporting requirements.
		• Controls for receiving waterways may include:
		  ○ Designation of 'no go' zones for construction plant and equipment.
		  ○ Creation of catch/diversion drains and sediment fences at the downstream boundary of construction activities where practicable to support containment of sediment-laden runoff.
		• Erosion and sediment control measures will be implemented and maintained at all work site in accordance with the principles and requirements in Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom 2004) and Volume 2D (NSW Department of Environment, Climate Change and Water 2008b), commonly referred to as the "Blue Book".	

	WT-04	Box culvert crossings to enable access over Physics Creek will be designed and constructed in compliance with DPI Water Guidelines, including: • Guidelines for Controlled Activities on Waterfront Land (the CAA Guidelines) (Department of Planning, Industry and Environment (DPIE) Water, 2018). • Why Do Fish Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Department of Primary Industries (DPI) Fisheries, 2003). • Fisheries NSW Policy and guidelines for fish habitat conservation and management, (NSW DPI, 2013).	Construction
	WT-05	Post-construction, disturbed areas will be stabilised by the establishment and maintenance of a vegetated ground cover consisting of low-growing grasses.	Operation
	WT-06	Water sources for the operation of the Project will be confirmed during the detailed design phase and in consultation with suppliers and landholders and be subject to availability.	Operation
	WT-07	An OEMP will be developed for the Project to address potentially adverse impacts on the receiving environment surface water quality during the operational phase. This will include the development and appropriate maintenance of suitable ground cover around solar panels, and grassed table drains near access tracks to minimize the potential for erosion and export of sediment. Additional measures for the treatment of stormwater quality are not considered necessary.	Operation
Flood	F-01	Solar panels will be designed to provide a minimum of 300 mm freeboard for the lowest edge above the maximum 1% AEP flood level.	Pre-construction
	F-02	Solar panel piles will be designed to withstand the 1% AEP flood velocities expected in the Project Area.	Pre-construction
	F-03	Further flood investigations will be carried out where required during detailed design to confirm the flood immunity objectives and design criteria for the Project are met including the need for collapsible fencing to limit afflux.	Pre-construction

Issue	ID	Mitigation and Management Measure	Phase
	F-04	An Emergency Response Plan (ERP) will be prepared in consultation with relevant emergency services organisations (i.e., FRNSW, NSW Rural Fire Service (RFS), NSW Ambulance and relevant local emergency management services). The ERP will include a Flood Response Plan (FRP) which will: • detail emergency response procedures including an evacuation plan for site personnel, the associated dwelling and surrounding premises during flood events • identify procedures for safety of personnel during PMF events noting that safe egress from the Project Area will not be possible during these events • identify a safe route between the area of operations and onsite residence to provide staff and/or visitors the ability to 'hunker in place' during extreme flood events.	Pre-construction
	F-05	Debris will be cleared from fencing following flood events.	Construction, Operation
Hazards	H-01	A final hazard analysis (FHA) will be completed for the Project when the Project design has achieved an adequate level of detail (i.e. specific BESS technology has been selected and layout has been confirmed).	Pre-construction
	H-02	An Emergency Response Plan (ERP) will be prepared consistent with HIPAP 1 in consultation with relevant emergency services organisations (i.e., FRNSW, NSW Rural Fire Service (RFS), NSW Ambulance and relevant local emergency management services). The ERP will: • detail the management measures to minimise the risk of hazardous events • detail emergency response procedures including an evacuation plan for site personnel, the associated dwelling and surrounding premises. The ERP will be submitted to the NSW RFS and FRNSW for comment prior to finalisation.	Pre-construction
	H-03	In accordance with the PHA BESS purchase, design, configuration, operation and maintenance activities will be in line required national and international guidelines.	Throughout
	H-04	Training will be provided for all personnel responsible for operations, maintenance and emergency response.	Throughout
Electromagnetic Field	EMF-01	All EMF generating infrastructure will be buffered from the boundary of the Project Area beyond industry standards.	Pre-construction
	EMF-02	All Project infrastructure will be designed, installed and maintained in accordance with relevant industry standards.	Pre-construction
	EMF-03	All relevant procedures in relation to a high voltage installation will be adhered to throughout the life of the Project	Throughout
	EMF-04	Public access will be restricted throughout the life of the Project.	Throughout

Issue	ID	Mitigation and Management Measure	Phase
Contamination	C-01	If indications of contaminated soils are detected (such as odour, discoloration, or suspicious debris), the area will be flagged and potentially contaminated soil should be removed and replaced. A stop work procedure will be enacted while soil samples are take and tested identify the contamination type, followed by the formulation and implementation of an appropriate management strategy and engagement with relevant authorities as required.	Construction
	C-02	A Spill and Contamination Response Plan would be developed as part of the overall ERP to prevent contaminants affecting adjacent surrounding environments. The plan would include measures to: • Respond to unexpected finds (e.g., pesticide containers or asbestos), including stop work protocols and remediation and disposal requirements. • Requirement to notify the EPA for incidents that cause material harm to the environment (refer s147-153 of the POEO Act). • Manage the storage of any potential contaminants onsite. • Mitigate the effects of soil contamination by fuels or other chemicals including emergency response and the EPA notification procedures. • Ensure that machinery arrives on site in a clean, washed condition, free of fluid leaks. • Prevent contaminants affecting adjacent pastures, dams, water courses and native vegetation. • Monitor and maintain spill equipment. • Induct and train all site staff.	Throughout
Landscape and Visual	LV-01	A 30 m biodiversity corridor will be established along the northern boundary of the Project Area. The screening will be: • Planted prior to commencing operation. • Be designed and maintained in accordance with RFS's Planning for Bushfire Protection 2019 (or equivalent) and in consultation with Council. • Maintained with appropriate weed management. • Comprised of species that are endemic to the region. The following species are proposed: ○ *Eucalyptus tereticornis, Lophostemon suaveolens, Melaleuca quinquenervia, Eucalyptus siderophloia, Melaleuca alternifolia, Acacia concurrens, Allocasuarina torulosa.*	Construction
	LV-02	The following measures will be implemented by Ark Energy to control the level of off-site night lighting from the Project: • Only use lighting for areas that require lighting i.e. paths, building entry points. • Reduce the duration of lighting.	Construction

Issue	ID	Mitigation and Management Measure	Phase
		• Switch off lighting when not required. • Consider the use of sensors to activate lighting and timers to switch off lighting. • Use the lowest lighting intensity required for the job. • Use energy efficient bulbs and warm colours. • Direct light downwards to eliminate. • Ensure lights are not directed at reflective surfaces. • Use non-reflective dark coloured surfaces to reduce reflection of lighting. • Keep lights close to the ground and / or directed downwards. • Use light shield fittings to avoid light spill.	
Glint and Glare	GG-01	If the PV arrays 6,10 and 19 (which have been identified as having the potential to for 'yellow' glare) are found to cause 'yellow' glare during operation, then the Project will adopt the following tracking pattern: • Normal tracking angle of ±60° angle. • No backtracking operation. • In this case, the panels will move between the operational range (maximum tilt) and remain at this angle only switching back during the night. This tracking pattern will only be utilised for the periods and times of year when glare impacts are potentially possible (see **Section 6.9.3.2**). Outside of these times, the panels would move as per desired tracking patterns.	Operation
Traffic	TR-01	Construction of the proposed upgrade works to the Summerland Way / Main Camp Road intersection to provide a rural basic left (BAL) treatment on the northern approach and a rural short channelised right (CHRs) standard treatment on the southern approach, as per Figure 8.2 of Part 4A and Figure A7 of Part 4 of Austroads Guide to Road Design.	Construction
	TR-02	Clearing restricting vegetation (permanently to the ground) to enable adequate sight distances (SISD >300 m light vehicles / >317 m heavy vehicles) to/from the southern approach. Ark Energy have commenced discussion with RVC regarding the initial and ongoing management of this required vegetation clearance.	Construction
	TR-03	Provision of upgrade works to the relevant sections of Main Camp Road (Summerland Way to Avenue Road – approx. 0.515 km) and Avenue Road (Main Camp Road to proposed Site Access 3 – approx. 4.443 km) to provide a cross section providing a 6 m sealed pavement on a 7 m formation, as agreed with Council.	Construction

Issue	ID	Mitigation and Management Measure	Phase
	TR-04	Provision of additional widening areas on the northbound and southbound departures of the Summerland Way / Main Camp Road intersection to provide bus layby / set down areas, enabling school bus pickup and drop off movements to be completed clear of the adjacent vehicle movements at the intersection.	Construction
	TR-05	The existing road reserve boundary of Avenue Road will be realigned to enable the upgraded configuration of the link to be wholly contained within the new extents of the road reserve. Further details of the proposed revised alignment of the road reserve boundaries are proposed to be provided as part of the detailed design of the required road upgrade works to Avenue Road.	Construction
	TR-06	Installation of advisory "truck turning" signage on the Summerland Way approaches to the intersection with the Main Camp Road, to highlight to motorists the presence of the Project access and the potential for turning heavy vehicles to/from the side road.	Construction
	TR-07	Provision of suitable traffic management measures (traffic control / temporary traffic signals) at the Main Camp Road / Avenue Road intersection to enable the larger heavy vehicle movements associated with the Project to safely traverse the intersection clear of opposing traffic.	Construction
	TR-08	Construction of the three identified access points to the Project Area on Avenue Road (SA1, SA2 and SA3) generally in accordance with the site access arrangement for articulated vehicles outlined in TfNSW's Typical Rural Property Access – Northern Region standard drawing (as per Figure 7.4 of Austroads Guide to Road Design Part 4: Intersections and Crossings – General).	Operation
	TR-09	Completion of minor works along the identified OSOM transport routes to accommodate the swept paths of the OSOM transformer and switch room transport vehicles, including the relocation of signage infrastructure and construction of required temporary hardstand pavement areas as identified in the OSOM Route Assessment for the Project (see Appendix D of the TTIA).	Construction
	TR-10	Preparation of a Traffic Management Plan (TMP) for Project outlining proposed management measures and processes to minimise the impact of the Project on the external road network.	Construction

Issue	ID	Mitigation and Management Measure	Phase
Biodiversity	BD-01	• Preparation and implementation of a Biodiversity Management Plan (BMP). • The BMP will be reviewed and approved by NSW Biodiversity Conservation and Science (BCS) prior to construction, and include the following framework and Project commitments: ○ Protecting vegetation and fauna habitat outside the development footprint such as Koala habitat. ○ Managing the remaining remnant vegetation and fauna habitat within or surrounding the subject land toward a benchmark state using improve and maintain principles, minimising indirect impacts, especially to known threatened flora species and potential fauna species such as Barking Owl, Square-tailed Kite, Brush-tailed Phascogale, Common Planigale, Southern Myotis, and Green-thighed Frog. ○ Demarcation of retained areas of vegetation. ○ Ongoing vegetation monitoring of retained vegetation areas within the subject land including collection of BAM plots prior to construction (if no baseline data is applicable) and at year 1, year 3 and year 5 post construction. ○ Training and education awareness for all construction staff and operational staff on key threatened species, both flora and fauna, relevant to the region and Project. ○ Contain relevant sub plans for overall weed and biosecurity management (biosecurity management plan), pest animal management and rehabilitation management to reduce the risk of spreading biosecurity items in/out of the Project Area upon implementation. ○ Plans showing areas to be cleared and areas to be protected, including exclusion zones, protected habitat features and revegetation areas. ○ Fauna monitoring and management protocols including identification and reporting of fauna mortalities to the relevant BCS office. ○ Collection of detailed baseline weed data and ensuring no increase of key emerging weeds or invasive pests. ○ Commit to ongoing consultation with Local Land Services (LLS) on fox control and baiting programs. ○ Measures to contain and minimise impacts on Cane Toads. ○ Marking and identification of retained tree hollows and measures to minimise impacts to these features. ○ Two stage pre-clearing protocols, including pre-clearing inspections, establishment of exclusion zones (including flashing on perimeter fence) and on-ground identification of specific habitat features to be retained and/ or relocated. ○ Procedures for unexpected threatened species finds and fauna handling. ○ Clear performance targets and monitoring criteria. ○ Timing and responsibilities of management activities and corrective actions.	Pre-construction, Construction, Post-construction

Issue	ID	Mitigation and Management Measure	Phase
		○ Annual reporting requirements and consultation program with the relevant regulator. ○ Include a species lists for revegetation of the biodiversity corridor (see mitigation measure BD-02). • A recommended outline of the BMP is provided in Section 7.1 of the BDAR.	
	BD-02	A biodiversity corridor will be established on the northern boundary of the Project Area to increase visual amenity and connectivity between vegetation patches.	Construction, Post construction
	BD-03	Exclusion zones will be established including: • Installation of flashing on perimeter fencing to restrict climbing Koalas and escape structures near forested areas retained vegetation should Koala become trapped within the perimeter fencing. • Frog exclusion fencing will be set up at the limit of clearing and surrounding riparian corridors to be retained.	Construction
	BD-04	All material stockpiles, vehicle parking and machinery storage, and other ancillary works will be located within areas considered impacted within the current assessment to date (at the time of EIS submission) and will not be located within retained vegetation outside the impact area unless an updated impact assessment is undertaken.	Pre-construction, Construction
	BD--05	Dust suppression will be undertaken as required using water sprays, water carts or other media on: • Unpaved work areas subject to traffic or wind. • Sand, spoil and aggregate stockpiles. • During the loading and unloading of dust generating materials.	Pre-construction, Construction
	BD-06	• A Construction Environment Management Plan (CEMP) will be implemented by Ark Energy and will include an adaptive management component for impacts on biodiversity that are uncertain such as: ○ Inadvertent impacts to native vegetation adjacent to the Development Footprint. ○ Introduction of pests, pathogens and weeds to native vegetation adjacent the Development Footprint and further afield. ○ Vehicle strikes. ○ Weed species would be managed as part of the CEMP. • A biosecurity management plan prepared as part of the Project's CEMP/OEMP is recommended and will reduce the risk of spreading weeds and pathogens, and other biosecurity items into or out of the impact area upon implementation.	Pre-construction, Construction, Post-construction
	BD-07	• Shading and artificial light impacts will be minimised through detailed design. • Lighting will be designed in general accordance with Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting.	Construction

Issue	ID	Mitigation and Management Measure	Phase
	BD-08	Any potential noise impacts on biodiversity will be managed as part of the Project's CEMP. Biodiversity values will be considered as sensitive receivers in the NVMP.	Post-construction
Aboriginal Heritage	AH-01	RVSF-UMW-01 will be collected by a qualified archaeologist(s) and RAP representatives prior to construction. The collection method will be as follows: • The stone artefact (and any previously undetected stone artefact associated with the site) will be flagged on the ground and recorded with GPS and photography. • All artefact(s) will be collected into snap lock plastic bags marked with the Project name, site name, collection date and waypoint number. • All artefact(s) will be sorted and recorded post-fieldwork with respect to technological type, implement type, raw material, and dimensions.	Pre-construction
	AH-02	An Aboriginal Cultural Heritage Management Plan (ACHMP) will be developed following Project approval in consultation with Heritage NSW and RAPs. It will provide details of: • All Aboriginal sites identified during the archaeological investigation for the Project. • Management measures and their progress towards completion. • RAP access arrangements for a selection of significant sites for educational purposes. • Measures to ensure ongoing consultation and involvement of Project RAPs. • RAP access arrangements for a selection of significant sites for educational purposes. • Protocols for newly identified sites. • Protocols for educating staff and contractors of their obligations relating to Aboriginal cultural heritage values through a site induction process. • Protocols for suspected human skeletal materials. • Protocols for the ongoing care of salvaged Aboriginal objects. • Provisions for review and updates of the ACHMP. In addition to the points above, the ACHMP will address all relevant conditions of approval and provide for more details of the measures outlined above.	Construction
Historic Heritage	HH-01	• An unexpected heritage finds protocol will be established and included in the Heritage Management Plan for the Project. The protocol will clearly identify contact persons and steps to be implemented. • A heritage-specific induction will be undertaken by all Project team members and construction contractors to support the effective implementation of the protocol.	Construction

Issue	ID	Mitigation and Management Measure	Phase
	HH-02	• In the unlikely event that unexpected historical archaeological material is discovered, all works on the Project will cease and a suitably qualified archaeologist will be consulted to determine an appropriate course of action. • Depending on the extent and significance of the archaeological remains encountered, additional assessment and investigations, and consultation with Heritage NSW may be required prior to the re-commencement of works.	Construction
Soils, Land Use & Agriculture	SL-01	• An Erosion and Sediment Control Plan (ESCP) will be prepared that addresses specific soil dispersion risks based on disturbance activity during each phase of the Project. The ESCP will be developed in accordance with the Managing Urban Stormwater: Soils and Construction Volume 1 "The Blue Book" (NSW Department of Environment, Climate Change and Water 2008b).	Pre-construction
	SL-02	• A biosecurity management plan prepared as part of the Project's CEMP/OEMP is recommended and will reduce the risk of spreading weeds and pathogens, and other biosecurity items into or out of the impact area upon implementation.	Pre-construction
	SL-03	• During construction, all soil stripping will be localised and soil will be maintained as per the ESCP to maintain soil profiles when soil is reinstated. • Targeted soil controls will be implemented to manage the risk to sodic and dispersive soils throughout the Development Footprint. • In areas of high impact soil disturbance, topsoil stripping will take place to ensure availability during rehabilitation. Topsoil materials will otherwise be stockpiled separately to subsoils and subsoils to be treated with gypsum prior to stockpiling.	Construction
	SL-04	• An OEMP will be developed in consultation with DPI Agriculture and will be implemented post construction. The OEMP will detail the management requirements, including: ○ Inspection of all vehicles and machinery entering the Project Area, and cleaning if applicable to remove weeds including seeds. ○ Appropriate weed management practices to be adopted, including regular weed spraying. ○ Appropriate pest management practices to be adopted. ○ Limit vehicle access to the established internal road network.	Operation
Economic	EC-01	• Prepare an AEPS prior to construction. The AEPS will include: ○ Measures to ensure there is sufficient accommodation for the workforce associated with the construction phase of the Project, especially at the peak of the Project's construction.	Pre-construction

Issue	ID	Mitigation and Management Measure	Phase
		○ Avoid the use of established long term rental properties to house construction workers (unless market conditions identify a surplus of stock). ○ Measures to address any specific cumulative impacts arising associated with other SSD projects in the area. ○ Consideration of ongoing impacts on labour and housing of the Lismore flood recovery program (if still relevant) ○ Measures to prioritise the employment of local workers and the procurement of local businesses for the construction and operation of the Project. ○ A program to monitor and review the effectiveness of the strategy over the life of the Project, including regular monitoring and review programs.	
	EC-02	• Develop a Community Shared Benefit Strategy (CSBS)/CBF. Details regarding the proposed CBF are provided in Section 2.7.3 of this EIS.	Throughout
Noise	NS-01	A Noise and Vibration Management Plan (NVMP) will be prepared and implemented as part of the Construction Environmental Management Plan (CEMP). The NVMP will generally follow the approach in the *Interim Construction Noise Guideline (ICNG), NSW Department of Environment and Climate Change* (DECC) 2009 and identify: • All potential significant noise and vibration generating activities associated with the Project. • Feasible and reasonable mitigation measures to be implemented. • A monitoring program to assess performance against relevant noise and vibration criteria. • Arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures. • Contingency measures to be implemented in the event of non-compliance with noise and vibration criteria. The CEMP and NVMP should be regularly updated to account for any changes in noise and vibration management of the Project.	Operation
	NS-02	All sensitive receivers likely to be affected should be notified at least seven days prior to commencement of any works associated with the activity that may have an adverse noise or vibration impact. The notification will include: • Details of the Project. • The construction period and construction hours. • Contact information for project management staff. • Complaint and incident reporting. • How to obtain further information. • Proposed mitigation measures.	Construction

Issue	ID	Mitigation and Management Measure	Phase
	NS-03	All employees, contractors and subcontractors will receive an environmental induction. The induction will include at a minimum, all applicable mitigation measures; hours of works; any limitations on high noise-generating activities; location of nearest sensitive receivers; designated parking areas; relevant approval conditions and incident procedures.	Pre-construction
	NS-04	Advanced warning of upcoming works and potential disruptions can assist in reducing the impact on the community. Typically distributed on a monthly basis, notifications may consist of a letterbox drop, and/or email mailing lists, and published on the website. Updates detail work activities, time periods over which these will occur, impacts and mitigation measures. Notification should be a minimum of seven days prior to the start of works. The approval conditions for projects may specify requirements for notification to the community about works that may impact on them.	Pre-construction, Construction
	NS-05	Verification monitoring of noise and/or vibration levels will be undertaken during construction is in the form of routine checks of noise levels or following reasonable complaints, conducted at the affected receiver(s) or a nominated representative location. Where monitoring finds that the actual levels exceed those predicted in the assessment then immediate refinement of mitigation measures may be required and the management plan amended. Attended measurements will be undertaken within a period of 14 days from the commencement of construction activities (or as agreed with the DPHI/EPA). For project durations greater than three months, attended measurements are to be repeated on a three-monthly basis, where reasonable and feasible, as part of the audit cycle. Where outside of standard work hours (OOWH) are required, attended measurements must be undertaken at the time intervals described in the management, OOWH assessment, approval and/or licence conditions.	Construction
	NS-06	Specific notifications will be letterbox dropped, hand distributed, or via phone calls, to identified stakeholders no later than seven calendar days ahead of construction activities that are likely to exceed the noise objectives. Alternatively (or in addition to), communications representatives from the contractor will visit identified stakeholders at least 48 hours ahead of potentially disturbing construction activities and provide an individual briefing. The specific notification provides additional information when relevant and information to more highly affected receivers than covered in general letterbox drops. This form of communication is used to support periodic notifications, or to advertise unscheduled works.	Construction
	NS-07	Contractors will keep noise to a minimum, including limiting the use of loud stereos/radios, shouting on site and car door slams.	Construction
	NS-08	The noise levels of plant and equipment will have operating Sound Power or Sound Pressure Levels consistent with those nominated in Table 6.1 of the NVIA.	Construction, Operation

Issue	ID	Mitigation and Management Measure	Phase
	NS-09	Noise emitting plant will be directed away from sensitive receivers and be throttled down or shut down when not in use.	Operation
	NS-10	Non-tonal reversing beepers will be fitted and used on all construction vehicles and mobile plant used regularly on site and for any out of hours work.	Construction
	NS-11	Where feasible and reasonable, construction should be carried out during the standard daytime working hours in accordance with the *Interim Construction Noise Guideline* (ICNG), NSW Department of Environment and Climate Change (DECC), 2009: • Monday to Friday: 7.00 am–6.00 pm. • Saturday: 8.00 am–1.00 pm. • Sunday and public holidays: No work. In cases of emergencies, major asset inspection or maintenance programs may be required to be undertaken outside standard hours. In these situations, where practical, Richmond Valley Council and surrounding landholders would be notified of any works expected to be performed outside standard daytime work hours that may be expected to cause noise exceedance to neighbouring dwellings. Work generating high noise will be scheduled during less sensitive time periods.	Construction
	NS-12	Project traffic will be restricted to 60 km/h along Avenue Road.	Construction, Operation
Vibration	VB-01	The actual construction equipment to be used on site would be confirmed by the construction contractor during the detailed design phase. For any additional vibration generating plant, minimum working distances will need to be established. In the event that any vibration-generating equipment would be used within the recommended safe working distances nominated in Table 6.3 of the NVIA, the following is recommended: • An independent specific structural assessment is undertaken on the structure to ascertain the structural integrity and its ability to withstand vibration, and establishment of an appropriate vibration criterion. • A dilapidation survey is undertaken on the structure prior to works commencing, and regular inspection of the structure throughout the construction activities. • A pre-construction vibration monitoring to establish baseline vibration impacts induced on the structure from existing sources. • Establish site specific vibration minimum working distances for the nominated equipment on site.	Pre-construction, Construction, Operation

Issue	ID	Mitigation and Management Measure	Phase
		Where appropriate, continuous vibration monitoring is conducted on the structure for the duration of the period of construction while vibration generating equipment is used. The vibration logger should be equipped with the facility to remotely alert the site to reduce or cease construction activities if vibration levels are approaching the criterion threshold.	
Waste	W-01	A Waste management Plan (WMP) will be prepared including a detailed breakdown of the waste types and quantities in accordance with relevant legislation and guidelines. The WMP will include the following measures: • A summary of the waste types, classification and estimated annual quantities of wastes produced during the construction of the Project. • Measures to manage waste disposal in accordance with the principles of the waste hierarchy, with emphasis on reducing, reusing and recycling wastes prior to disposal. • The procedure for assessing, classifying and storing waste in accordance with EPA guidelines. • Procedures for storage, transport and disposal of waste. • Monitoring, record keeping and reporting, including the use of waste tracking data to demonstrate the lawful disposal of contaminated products, waste or residues generated by the Project (if any).	Pre-construction