

C11 Drill and Blast Management Plan

Aim and Objective					
<p>C-11 Drill and Blast Management Plan (DBMP) sets out the approach to managing and mitigating the impacts of drilling and blasting during construction. Implementation of the DBMP in conjunction with the Drilling and Blasting Method Statement will provide the basis for ensuring the drilling and blasting procedures and processes are carried out in accordance with required approvals and do not result in injury, loss of life, damage to property or the environment.</p>					
Summary of Impacts and Risks					
<p>Drilling and blasting operations associated with the construction of the project pose a risk to construction personnel, communities and the environment. The potential risks and impacts associated with undertaking the drilling and blasting activities include:</p> <ul style="list-style-type: none"> Procedures and processes before, during and after drilling and blasting not being followed, resulting in injury, loss of life, damage to property or the environment. Inappropriate transport, handling and storing of explosives resulting in unplanned explosions. Inadequate community engagement and consultation resulting in injury, loss of life, damage to property. Noise, vibration and air quality impacts. <p>Note that the DBMP is to be implemented in conjunction with P-1 Construction Environmental and Social Management Plan, P-2 Biodiversity Management Plan, P-3 Stakeholder Engagement and Communications Plan, P-6 Grievance Redress Mechanism, P-8 Worker's Health and Safety Plan, P-9 Worker's Code of Conduct, P-7 Security Management Plan, P-11 Traffic Management Plan, P-13 Hazardous Materials Management Plan, P-14 Spill Prevention and Emergency Response Plan, P-15 Air Quality Management and Dust Control Plan, C-13 Noise and Vibration Management Plan, M-6 Construction Works Monitoring Plan, M-2 Water Quality Monitoring Plan, and M-7 Air Quality and Noise Monitoring Plan.</p>					
Mitigation and Management Actions					
#	Issue or Risk	Action	Timing / Frequency	Responsibility	
C-11-1.	Permits and approvals	<ul style="list-style-type: none"> Prior to drilling and blasting activities, the relevant permits and licences required under Solomon Islands law for the importation, storage and use of explosives (User's Licence and Dealer's Licence) will be obtained. 	Prior to start of drilling and blasting activities	HEC Construction Manager	
C-11-2.	Health, safety and environmental controls	<ul style="list-style-type: none"> All drilling and blasting operations will be conducted in accordance with Annex C-11-I Drilling and Blasting Method Statement. Appropriate PPE will be provided and worn at all times in accordance with P-8 Workers Health and Safety Plan and M-7 Air Quality and Noise Monitoring Plan. Reporting of accidents or other incidents will be undertaken in accordance with the procedures set out in P-1 CESMP and P-8 Workers Health and Safety Plan. P-8 Workers Health and Safety Plan (specifically Annex P-8-VIII Tunnel Work Safety Guideline), P-7 Security Management Plan, P-13 Hazardous Materials Management Plan, P-15 Air Quality Management and Dust Control Plan, and C-13 Noise and Vibration Management Plan will be implemented to ensure impacts to workers, property and communities from drilling, blasting and tunnelling are minimised. Implementation of P-2 Biodiversity Management Plan and C-3 Forest Clearance Plan will be implemented to minimise impacts on flora, fauna, and habitats. 	Prior to and during all drilling and blasting activities	HEC Construction Manager HEC HSE Manager	
C-11-3.	Impacts of noise and vibration on sensitive receptors	<ul style="list-style-type: none"> Noise and vibration measures detailed in C-13 Noise and Vibration Management Plan and Annex C-11-I Drilling and Blasting Method Statement will be implemented. Drilling and blasting in areas close to villages (e.g. access roads, powerhouse), blasting at the dam site, and movement of heavy vehicles through villages will be restricted to the period 7:00am to 5:00pm. Where possible, machinery will be chosen to reduce noise and vibration. All mobile and stationary equipment will be equipped with fully functioning noise mufflers and baffles. 	Prior to and during all drilling and blasting activities	HEC Construction Manager	
C-11-4.	Air quality impacts to sensitive receptors	<ul style="list-style-type: none"> Dust controls will be implemented in accordance with P-15 Air Quality Management and Dust Control Plan. 	Prior to and during all drilling and blasting activities	HEC Construction Manager HEC HSE Manager	
C-11-5.	Community engagement	<ul style="list-style-type: none"> The community will be notified at least 7 days (one week) prior to drilling or blasting activities. Public notification will be undertaken in accordance with the Drilling and Blasting Method Statement (Annex C-11-I) and P-3 Stakeholder Engagement and Communications Plan. Complaints and grievances will be addressed in accordance with P-6 Grievance Redress Mechanism. 	Prior to and during all drilling and blasting activities	HEC Construction Manager HEC HSE Manager	
Monitoring Requirements					
#	Title	Description	Target / Performance Indicator	Timing / Frequency	Responsibility
C-11-A.	Permits and Approvals	Copies of permits and all associated supporting material are obtained and kept on Project Space.	All documentation is on Project Space	Six monthly audit of documentation.	HEC Construction Manager
C-11-B.	Drilling and blasting inspections	Inspections of all drilling and blasting operations for compliance with the Drilling and Blasting Method Statement (Annex C-11-I) .	No FORs or NCRs issued.	Daily.	HEC Construction Manager HEC HSE Manager
Supporting Documents					
Annex	Name	Description			
C-11-I.	Drilling and Blasting Method Statement	Drilling and Blasting Method Statement prepared by HEC and dated 04 January 2023. Details the procedures, process, construction schedule, safeguards/environmental requirements, and use of explosive materials at the site.			