

Planning Officer's Report - LDCA NOVEMBER 2019

APPLICATION	2019/62 – Rockfall Mitigation and Management Strategies
PERMISSION SOUGHT	Permission in Full
REGISTERED	7 August 2019
APPLICANT	St Helena Government
PARCEL	Various Land Parcels at these Locations (See Locality)
SIZE	Various Areas of land at these Locations
LAND OWNER	Crown Land
LOCALITY	Rupert Wharf, Rupert Valley (East & West), James Warf, James Valley
ZONE	Coastal Zone
CONSERVATION AREA	Coastal Village , Jamestown
CURRENT USE	N/A
PUBLICITY	The application was advertised as follows: <ul style="list-style-type: none">▪ Independent Newspaper on 9 August 2019▪ A site notice displayed in accordance with Regulations.
EXPIRY	23 August 2019
OBJECTION RECEIVED	None
DECISION ROUTE	Delegated / LDCA / EXCO

A. CONSULTATION FEEDBACK

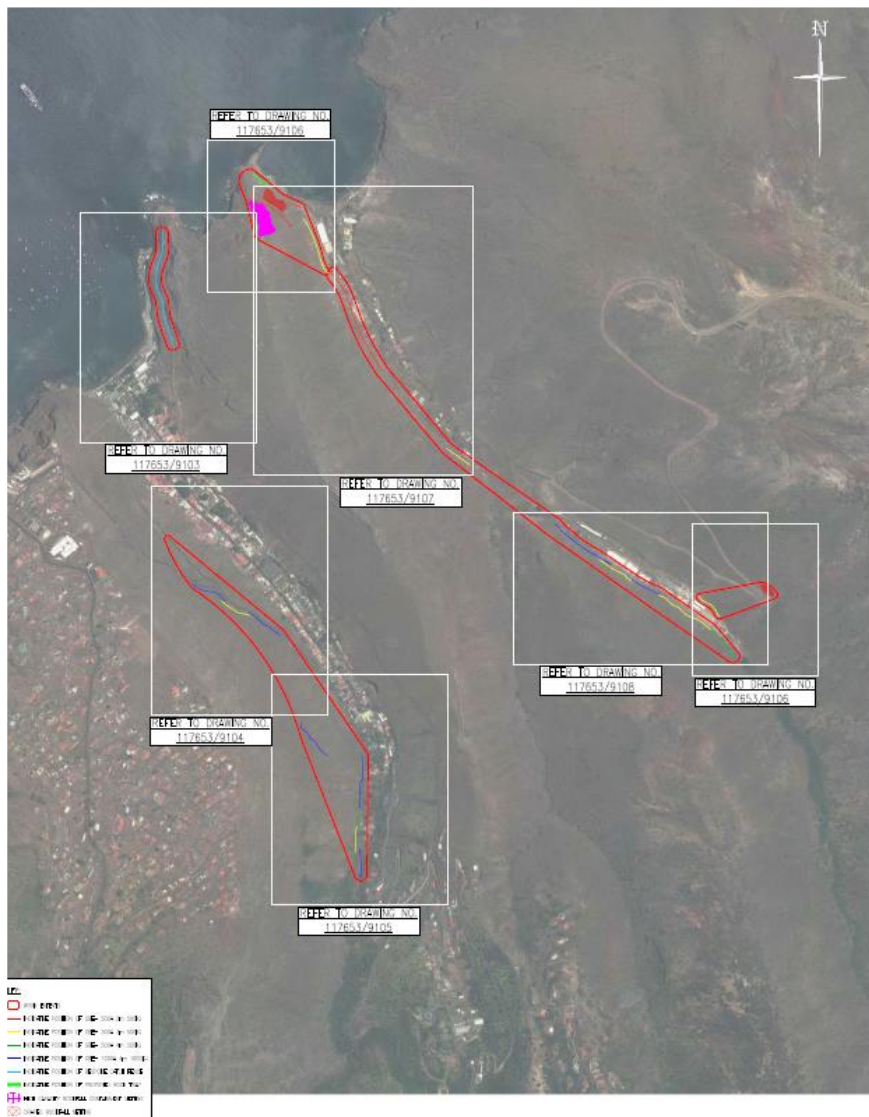
1. Water Division	No Objection
2. Sewage Division	No Response
3. Energy Division	No Response
4. Fire & Rescue	No Response
5. Roads Section	No Objection:
6. Property Division	No Response
7. Heritage	Not Consulted

8. Environmental Management	No Response
9. Public Health	No Response
10. Agriculture & Natural Resources	No Response
11. St Helena Police Services	Not Consulted
12. Aerodrome Safe Guarding	Not Consulted
13. Enterprise St Helena (ESH)	No Objection
14. National Trust	No Response

B. PLANNING OFFICER’S APPRAISAL

Location and Orientation: The development application covers number of locations in the Rupert Wharf, Rupert Valley (East and West), James Wharf and James Valley areas for the rockfall mitigation and management for the wellbeing of the area and safety. Within each of the locations there are number of areas where different types of mitigation work is proposed.

Diagram 1: Site and Location Plan



Zones & Restrictions: The application sites falls within the number of policy areas, zones and restrictions that includes amongst other; Heritage Coast and Jamestown Conservation Areas and Coastal and Intermediate Zones. In view of this, the proposal needs to be assessed for individual location and collectively for the whole. There are also sites that are sensitive in terms of the historic location and association. Similarly the position of the locations and its impact on the landscape is also an important consideration.

Development Proposals: The full nature of the proposed works include;

- The installation of rock catch fences of low and medium capacity, up to 4m high in both James Valley and Ruperts Valley;
- The installation of a small rockfall catch fence above James Wharf and immediately below the existing retaining wall of Mundens Path;
- The installation of high capacity rock fall netting on the cliffs above Ruperts Wharf;
- The installation of draped rockfall netting above Ruperts Wharf and on the Airport Link Road and,
- The construction of a rock trap at the toe of the slope adjacent to Ruperts Wharf.

Additionally the following works may also be required

- Localised scaling, rock reinforcement and anchor dowels and cable strapping

The length of existing fences within Jamestown totals at approximately 4,608m, with a maximum height of 4m above ground level. The length of the proposed new fences within James Valley is 890m (< 20% increase on the exiting total fence length). The total length of fences within Ruperts Valley is approximately 1,305m, with a maximum height of 4m above ground level. However, none of the proposed fences exceed the maximum height of existing rock fall protection fences.

Full details of the Rockfall Mitigation measures is set out in Table below.

Area of Site	Rockfall Mitigation Summary	Drawing Reference Number	Type of Fence and Dimensions (length x height)	Total Length of Fencing and Max. Height
James Wharf	Rockfall catch fence to mitigate the risks from rocks falling from the stonewalls on Munden's Walk.	117653/9103 117653/9109	1 x Bespoke Catch Fence (360m x 3.5m)	<i>Total Fence Length: 360m</i> <i>Max Fence Height: 3.5m</i>

James Valley West Side	<i>Ladder Hill Road / Shy Road Junction Area:</i> Rockfall catch fence located up-hill of the Ladder Hill Road / Shy Road Junction	117653/9104 117653/9110	2 x GBE-1000KJ Fences (120m x 4m) 1 x GBE- 500KJ Fence (100m x 3m)	<i>Total Fence Length: 890m</i> <i>Max Fence Height: 4m</i>
	<i>Hospital Area:</i> Additional catch fence mid slope on the West side of James Valley	117653/9105 117653/9110	1 x GBE-1000KJ Fence (140m x 4m)	
	<i>Cambrian House to Escort Gardens:</i> Rockfall catch fence at the toe of the slope on the West side of James Valley	117653/9105 117653/9110	<i>In order from North-South:</i> 1 x GBE-1000KJ Fence (170m x 4m) 1 x GBE 500KJ Fence (70m x 4m) 1 x GBE 500KJ Fence (80m x 3m) 1 x GBE 1000KJ Fence (90m x 4m)	
Rupert's Wharf	<i>Upper Slopes Above Munden's Path:</i> High capacity rockfall containment netting	117653/9106 117653/9113	1 x High Capacity Rockfall Containment Netting (Spider S3-130) (Approximately 4,138m ²)*	<i>Total Fence Length: 455m</i> <i>Max Fence Height: 3m</i> <i>Total Approximate Area of Netting: 6,265m²</i>
	<i>Mid Slopes:</i> Rockfall catch fence immediately down slope of Munden's Path	117653/9106 117653/9110	1 x GBE 500KJ Fence (160m x 2m)	
	<i>Lower Slopes:</i> Low capacity rockfall containment netting	117653/9106 117653/9112	1 x Draped Low Capacity Rockfall Netting (Approximately 2,127m ²)*	
	<i>Toe of Slope:</i> Rockfall catch fences and rock trap (where space allows)	117653/9106 117653/9110 117653/9115	1 x GBE 500KJ Fence (40m x 2m) 1 x GBE 500KJ Fence (190m x 3m) 1 x Bespoke Rock Trap (65m x 2m)	
	<i>Development Area:</i> Rockfall catch fence near to the bottom of the slope	117653/9107 117653/9110	1 x GBE 500KJ Fence (360m x 2m)	<i>Total Fence Length: 760m</i> <i>Max Fence Height: 4m</i>
	<i>Power Station:</i> Rockfall catch fence near to the bottom of the slope	117653/9107 117653/9110	1 x GBE 500KJ Fence (90m x 3m)	

Rupert's Valley West Side	BFI: Rockfall catch fence near to the bottom of the slope	117653/9108 117653/9110	<i>In order from North-South:</i> 1 x GBE 1000KJ Fence (220m x 4m) 1 x GBE 500KJ Fence (120m x 3m) 1 x GBE 1000KJ Fence (100m x 4m) 1 x GBE 500KJ Fence (200m x 3m) 1 x GBE 500KJ Fence (120m x 4m)	
	Haul Road: Rockfall containment netting on the rock slopes above the first hairpin	117653/9106 117653/9112	1 x Draped Low Capacity Rockfall Netting (Approximately 750m ²)*	Total Fence Length: 90m
Rupert's Valley East Side	BFI: Rockfall catch fence near to the bottom of the slope	117653/9106 117653/9110	1 x GBE 500KJ Fence (90m x 3m)	Max Fence Height: 3m Total Approximate Area of Netting: 750m ²

The Need for Rockfall protection and Management Strategy: Rockfall hazards has been a fact of life in St Helena and extensive protection measures that have been carried out since 2008 have eased fears, but still significant concerns remain. A site visit in 2018 concluded that based on the observations by the Engineers and discussions with SHG Rock Guards no significant changes to the outcrops have occurred in the previous 12 months, as such the current issued risk assessments and mitigation measures/management actions are still current for James Valley West and Rupert's Wharf. Additional remedial works are required on James Valley East on the catch fence bases displaying erosion to slow/stop the erosional process. Therefore, the proposed further mitigation works outlined in the Fairhurst Rockfall Mitigation and Management Strategy 2017 aim to reduce of future serious rockfall events.

The proposed rockfall mitigation works are intended to ensure greater safety and protection to people and property. It is recognised that there is a need for a level of sensitivity for works in areas of historic and heritage importance. The previous mitigation works undertaken whilst having some visual impact on the landscape, however they have become an acceptable feature. It is also recognised that health and safety is important for the future economic property of the Island and these will ensure a level of protection.

The table above provides details of the proposed protection works and locations in respect of this application and for the purpose of the report it is not considered necessary to include all the individual plan locations in the report.

C.Planning Policy Assessment

The relevant Land Development Control Plan policies that are applicable in respect of this development include the following:

Nature Conservation Area

Coastal Zone: CZ1, CZ6

Intermediate Zone: IZ1, IZ2

Built Heritage; BH1, BH6

Whilst the proposed development has some direct and indirect implications in respect of the policy identified for consideration, however it is considered that the general principles of the policies is not being compromised. In the spirit of wider protection of the built and natural environment of the Island and the promotion of heritage and nature conservation, these policies would support the proposed rockfall mitigation.

Prior to the submission of the development application, the applicant submitted Screening Opinion for the rockfall mitigation works to assess the potential impact of these works on number of environmental receptors. It was considered that there were number of receptors that would have some impact during the construction of the mitigation works in respect of noise, dust and ecology, however these are considered to be minimal and through remedial action their impact can be reduced. As regards ecology, it is important to ensure that work is undertaken when there is unlikely to be any breeding birds nesting within the cliff face. Similarly with the installation of netting this may have some impact on nesting bird that may nest within the cliff face and these birds would need to be located elsewhere. However, there is little evidence that there is any significant activity. In view of the information provided in the Screening Opinion it was concluded that full Environmental Impact Assessment in respect of proposed development was not required. However, there would be a requirement Environmental Management Plan or Contractor's Environmental Management Plan should be prepare and approved prior to the works commencing. These Plans should identify all potential environmental impacts and the mitigation measures that will be used to avoid or minimise these impacts.

Officer Assessment

There is a positive social and economic impact arising from the proposed development as it will ensure greater protection to life and property from roackfall for number of areas that are built up to slopes.

Soil, Water and Air: There no environmental impact in respect of soil, water or air as the site are predominantly scree slopes and exposed rock crags, it is unlikely that groundwater will be encountered during the works due to the natural topography of the land relative to the areas There will be minimal impact on air quality from diesel emissions from the drilling compressor will be released during the drilling of rock anchors and bolts however this is considered a low impact against the current emissions from cars/machines on the island.

Dust and Noise: Dust generated during all aspects of the works and noise levels have some environmental impact particularly in transporting materials, however this can be controlled by watering, covering or other appropriate measures and areas of works that may generate dust are not in close proximity to facilities that are highly dust-sensitive. Noise can be also be controlled where possible and again there are no nearby noise sensitive receivers.

Ecology (flora and fauna): As the development locations are dominantly composed of scree slopes and crags, the ecological impact of the proposed works is relatively low and is not expected to have a significant effect on ecological receptors. In respect of the previous phases of mitigation works, there was no significant impact on flora and fauna from

Visual: It is considered the proposed design is likely to have minimum visual impact whilst ensuring safety as the highest priority. The proposed fence designs do not differ significantly to the existing fences on the island and fence heights do not exceed the maximum fence existing on the previous mitigation works. The fence and netting designs are considered to utilise the natural topography of the site, it therefore decreases any visual impact on the landscape. The existing fences are present within James Valley and the proposed increase in length of fence in James Valley is considered minimal. The visual impact is therefore considered to be insignificant.

The works within Ruperts Wharf are the only areas which include new construction, all other works are to build on existing fences and mesh therefore there is no new visual impact to these areas. Rupert's Wharf is the only area that comprises the construction of new fences, however, as this area is largely industrial and not heavily populated by tourists, the visual impact is considered to be low.

Cultural Heritage and Archaeology: Within the proposed mitigation areas, there two sites of archaeological importance to note. Munden's Path comprises a stone wall which is currently failing and releasing stones to the town below. Wired mesh currently exists along the scree slope around Mundens Path and the proposed works include a catch fence below the stone wall which will not negatively impact the

current state of the wall and will mitigate against any loose stones that fall towards the town.

There are two burial areas of 'slave grave' within Ruperts Wharf that would be affected by the proposal. However, the proposals have been amended to have regards to the sensitivity of this area and fences are all proposed above the known area and are to be drilled into rock as opposed to soil therefore very low to no impact on the site, creating a buffer around the edge of the affected area.

Diagram 2: Location of the Works in Rupert that historic sensitivity





Chief Environmental Officer

The Chief Environmental Officer (CEO) has raised no objection to the proposal and is in agreement that after the assessment of the EIA Screening Opinion that full EIA is not required in respect of this development. This is in light of the previous report and the protection works undertaken. The CEO recommends that any gaps identified in the EIA Screening Report should be addressed in the Environmental Management Plan or Contractor's Environmental Management Plan, particularly with regards Biodiversity that could potentially be impacted – sensitive flora and fauna, as the works in the Rupert area could impact the protected species of plant and invertebrates (samphire plant) and seabirds during nesting period.

Representation:

No representation has been received in respect of this development application.