

METHOD STATEMENT 1: SEARCH AND RESCUE PLAN OF PROTECTED PLANT SPECIES

DESCRIPTION OF ACTIVITY	SEARCH AND RESCUE OPERATION PRE-CONSTRUCTION
Actions	<ul style="list-style-type: none"> • A Botanist must be appointed to conduct a walk-through survey to identify all listed species that may occur within the project area, giving more attention to the 1,5ha renosterveld area fringing the stream in two parallel strips, that would be lost. This can be supplemented by observations from the ECO prior to construction. • Please refer to Addendum 1 for a list of succulents and bulbs to be protected. • Demarcation of the search and rescue area as per recommendations of the botanist appointed to conduct the search and rescue operation. • Rescued plants must be planted into a container to be housed within a temporary nursery on site. • The ECO to give permission for topsoil removal and vegetation clearing only to start when all search and rescue operations have been completed. The ECO should monitor construction activities to ensure that remnant renosterveld (that does not fall within the construction footprint) is not disturbed. • The collecting of plants by unauthorized persons should be prevented and signs stating so should be placed at the entrance to the site. • It is suggested that the area below the dam wall (to the west of the dam that will not be affected by the development of the dam) should be the receptor area for the plants that are rescued from the area of the dam. The rocky nature of the terrain will provide many niches for various plant species. • The size of planting holes should be sufficiently large to ensure the entire root system is well covered with topsoil. During transplanting care shall be taken to limit or prevent damage to roots. • Topsoil material will be replaced within the planting holes. Any remaining material will be responsible spread around disturbed areas for rehabilitation. • Plants should be watered immediately after transplanting to help bind soil particles to the roots and facilitate the new growth of functioning roots
Impact of actions	<p>The following impacts are anticipated as a result of undertaking the search and rescue activity:</p> <ul style="list-style-type: none"> • Potential damage to protected plants while conducting the survey i.e. stepping on a protected plant • Overlooking listed plants resulting destruction of the plant from ground clearing • Damage to the plant/ roots of the plant/ bulb during removal • Negligence in caring for the rescued plants being stored leading to death of plants

	<ul style="list-style-type: none"> • Not replanting rescued plants in correct manner • Over and under watering of plants after transplant, leading to destruction • Negligence in monitoring transplanted plants can lead death of plants, resulting in huge financial losses. 	
Severity of actions	Loss of protected and bulbs and succulents associated with critically endangered Central Ruêns Shale Renosterveld.	If all mitigation measures are implemented, the severity if the impact will be Negligible
Measures to mitigate the severity of the impact	Loss of protected and bulbs and succulents associated with critically endangered Central Ruêns Shale Renosterveld.	<p>Mitigation measures listed as follows:</p> <ul style="list-style-type: none"> • Ensure that only the Botanist/ trained staff handle the plants • Do a second walk-through to ensure all plants have been identified • Ensure staff is trained and guided as to care for the stored, rescued plants i.e. watering practices • Ensure staff is trained and guided to replanting practices
Remedial measures if mitigation measures are not implemented adequately on site.	<ul style="list-style-type: none"> • Recover plants that have been damaged/ neglected. • Retrain/ re-educate personnel to better identified listed plant species 	
Method of Access to site	Access to the site should be through existing access roads.	
Time period of maintenance activity & Monitoring	<p>The search and rescue operation should be conducted before construction starts.</p> <p>Post-construction monitoring of plants relocated during the search and rescue operation should be undertaken by the applicant/ landowner. This should be on a three-monthly basis for two years after transplanting to evaluate the success thereof, or as suggested by the appointed botanist who will be conducting the entire search and rescue operation.</p>	

Impacts described here are direct impacts only. Cumulative impacts have not been assessed.

High: Disturbance of area with important conservation value; destruction of rare or endangered species. No possible mitigation or mitigation is difficult, expensive, time-consuming.

Medium: Disturbance of area with potential conservation value or of use as a resource; complete change in species occurrence or variety.

Low: Disturbance of degraded area with little conservation value; minor change in species occurrence or variety. Mitigation easily achieved or little require

ADDENDUM 1: BULBS AND SUCCULENTS IDENTIFIED IN THE BOTANICAL IMPACT ASSESSMENT THAT NEED TO BE RESCUED AND REPLANTED



Figure 1: *Trichodiadema sp.*



Figure 2: *Gladiolus gracilis*



Figure 3: *Romulea flava*



Figure 4: *Indigofera heterophylla*



Figure 5: *Arctotis acaulis*



Figure 6: *Cyphia cf. digitata*