MS 03: MITIGATE DISTURBANCE OF WETLAND HABITAT AND COMPACTION OF SOILS OUTSIDE OF THE DEVELOPMENT FOOTPRINT (UP AND DOWN STREAM OF THE DAM) DURING CONSTRUCTION

DESCRIPTION OF TASKS AND SUBORDINATE ACTIONS

The purpose of this method statement is to describe the method which will be used to mitigate disturbance of wetland habitat and compaction of soils as a result of construction related activities outside of the development footprint, up and down stream of the proposed dam.

PRE-WORK REQUIREDED:

Environmental awareness training as per the Environmental Management Programme (Section 7.5.1 of the EMPr).
Demarcation of the development footprint of the proposed dam with signs that prohibit any vehicles or construction related activities outside of demarcated footprint (Section 7.10.4 of the EMPr).

DESCRIPTION OF WORK TO BE DONE: WHAT, WHEN, WHERE AND HOW

- Immediately rip compacted soil to a depth of 300mm and reprofile the area according to natural terrain units where any accidental disturbance to portions of the unchanneled valley bottom wetland falling outside of the demarcated construction footprint area has taken place.
- If the disturbed area will be prone to erosion (sheet runoff or formation of gullies), it is recommended that straw bales (not Lucerne or hay) are used to intercept the bulk of the runoff. The bales should be placed strategically along contour lines and pegged. Disturbance and removal of vegetation within the immediate vicinity of the area where the bales are placed should be kept to a minimum. Sediment should be cleared manually as needed. (Please refer to Method Statement 04).
- If stockpiling of materials is required, stockpiles must be placed 32m from the border of the unchanneled valley bottom wetland.
- Prohibit dumping of excess excavated material within the unchanneled valley bottom wetland (Please refer to the section 7 of the EMPr)
- Once construction is completed, all construction waste, rubble and equipment must be removed and disposed of in an appropriate manner as per the EMP.
- After construction, remove alien invasive plants manually as far as practically possible, from the construction footprint as well as any areas accidentally disturbed (please refer to Method Statement 02).

MONITORING:

It is the responsibility of the ECO to do daily site inspections to ensure work occurs within the demarcated areas and that disturbed areas not falling within the construction footprint, be rehabilitated accordingly.

ACCESS TO AND FROM THE SITE

No additional access required (there is existing access to the site).

Actions	***Responsibility***	***Potential impacts of these actions***	***Severity of impacts*** **High**: ***Disturbance of area with important conservation value; destruction of rare or endangered species. No possible mitigation or mitigation is difficult, expensive, and 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 required.***	***Measures to mitigate the severity of these impacts***	***Corrective/remedial measures if mitigation measures are not properly implemented on site***
Rip compacted soil of accidental disturbed area and reprofile area according to the natural terrain	*Contractor under supervision of the ECO*	*Failing to rip compacted soil and reprofiling the disturbed area can lead to increased stormwater runoff which will result in erosion and sedimentation*	*Medium*	*Environmental awareness training*	*Sediment should be cleared manually as needed*
Strategic placement and pegging of straw bales along contour lines to intercept bulk runoff	*Contractor under supervision of the ECO*	*Correct placement of straw bales will intercept sediment laden stormwater as well as decrease the velocity of stormwater, decreasing the erosion potential* *Incorrect placement of the straw bales can lead to increased*	*Positive impact* *Medium*	*Ensure the contractor places straw bales strategically*	*Rehabilitation includes the manual removal accumulated sediment,*

		erosion and sedimentation of the wetland habitat due to high velocity flow of surface water. *Failure to peg straw bales can lead to the blocking of the unchanneled valley bottom wetland*	*Medium*	*Ensure straw bales are pegged*	*infilling of erosion gullies and rills and stabilization of gullies and silt fences.*
Protect stockpiles of any material	*ECO/ trained personnel*	*Stockpiled material can wash into the wetland habitat causing blockages and erosion of the downstream wetland habitat*	*Medium*	*Ensure stockpiles are located at least 32m from the border of the unchanneled valley bottom wetland.* *Cover stockpiles with tarp or erosion blankets*	*Manual removal of washed away material from the downstream wetland habitat*
Erect signs prohibiting dumping of any materials within the unchanneled valley bottom wetland	*ECO/ trained personnel*	*Negligence in erecting the appropriate sings will allow for dumping to occur in the wetland habitat which can lead to nonreversible damage to the environment*	*High*	*Environmental awareness training*	*Recovering the local environment by removing all dumped material*