

Table 4 – Work Plan for Springbank Dam

Item No.	Category	Recommended Work	Year to Complete	Estimated Construction Duration	Estimated Project Cost (2012 dollars) Excludes HST
1 to 5 Year Work Plan					
1	Engineering Study	Inspect condition of the southeast steel sheet pile retaining wall tie-back system, including: <ul style="list-style-type: none"> Remove pavement and excavate fill material behind the retaining wall for inspection access to buried ties and walers. Inspect condition of 50 mm diameter tie back rods and structural steel walers and all bolted connections. Undertake NDT testing of sheet pile wall thickness. Prepare a summary engineering report including recommendations. 	2013	N/A	\$ 30,000
2	Rehabilitation	Rehabilitation of erosion at the top of the northeast and northwest precast concrete crib retaining walls (Engineering study undertaken by Riggs Engineering, 2011), including: <ul style="list-style-type: none"> Excavation at the top of the crib retaining walls. Installation of French drains. Backfill and regrade at top of walls (with swale). Remove vegetation on the surface of the retaining walls. 	2013	4 weeks	\$ 100,000
3	Rehabilitation	Rehabilitation of the southeast steel sheet pile retaining wall tie-back system, including: <ul style="list-style-type: none"> Possible replacement of waler bolts and reinforcement of tie rod connections. Possible waler replacement. Extent of work to be confirmed following completion of engineering study. See Note 1.	2016	2 weeks	\$ 80,000
4	Engineering Study	Undertake engineering pre-design report including: <ul style="list-style-type: none"> Review of functional components of the dam, and possible removal/elimination of obsolete components. Material testing and review. Review of potential structure modifications to improve function/operation of the dam. Include a review of the operations building at the south end of the dam. 	2017	N/A	\$ 35,000
Total Preliminary Cost for 1-5 year work plan =					\$245,000
6 to 10 Year Work Plan					
5	Rehabilitation	Structure rehabilitation including concrete repairs to the deck surface/soffit, girders, abutments, and piers (as required) and installation of expansion joint seals on the deck.	2018	12 weeks	\$ 600,000
Total Preliminary Cost for 6-10 year work plan =					\$600,000
Notes:					
1. Previous cost estimate provided by Riggs Engineering has been increased to include engineering costs, whaler replacement, and project contingencies.					
2. Repeated structure rehabilitation program proposed on a 5 year cycle (Item No. 5).					



Item No. 1 – Engineering Study

Detailed inspection and reporting on the southeast steel sheet pile retaining wall tie-back system

Reference: Condition Survey Report (2011) Springbank Dam, Appendix A (Inspection Forms), Page 7, Component: Retaining Walls, Description: Sheet pile retaining wall

Item No. 2 - Rehabilitation

Install French drains and re-grade at the top of north retaining walls and miscellaneous other repairs.

Reference: Condition Survey Report (2011) Springbank Dam, Appendix A (Inspection Forms), Page 7, Component: Retaining Walls, Description: Precast block retaining wall



Item No. 3 – Rehabilitation

Rehabilitation of the southeast steel sheet pile retaining wall tie-back system

Reference: Condition Survey Report (2011) Springbank Dam, Appendix A (Inspection Forms), Page 7, Component: Retaining Walls, Description: Sheet pile retaining wall

Item No. 4 – Engineering Study

Engineering pre-design report to review modifications to the structure

