

APPENDIX H – SEDIMENT AND EROSION CONTROL MEASURES

Sediment Control Plan for Construction of Pumped Storage Irrigation Reservoirs

The recommendations outlined herein are specific to pumped storage irrigation reservoirs and are based on the requirements defined in Manitoba Stream Crossing Guidelines for Protection of Fish and Fish Habitat (DFO and MNR, 1996).

The recommendations are provided to the contractors as part of the construction specifications, to provide them with specific measures that will reduce the amount of sediment that enters water bodies adjacent to construction sites to the lowest possible levels practical.

1. Prior to commencement of construction, the contractor will be prepared to control sediment from the construction site with a general plan based on an understanding of the site conditions and will have the materials on site that are needed to implement the plan.
2. The areal extent of the disturbance will be limited to the minimum needed for construction.
3. Existing vegetation; especially adjacent to waterways, shall be left intact wherever possible.
4. Grubbing will not commence until the latest possible time before the actual construction.
5. Materials to be wasted shall be removed from the construction site at the earliest convenience
6. Materials to be stockpiled shall be done in a pre approved location, with appropriate silt fencing perimeter to intercept runoff from the stockpile.
7. Area selected for the stockpiled materials shall be sufficiently removed from the natural stream channel to prevent direct runoff.
8. Grading of the site shall be away from the stream channel to a sump or field or, where possible, into grass or bush areas where sediment will be filtered through the natural vegetation and terrain.
9. Pumping of ponded water from the sump or any excavation where the water has been collected will be to a field or natural terrain and not directly into a stream channel; so that sediment will be filtered through the natural vegetation and terrain.
10. Site grading will be to the most stable inclination possible such that the velocity of runoff flow and associated erosion of exposed soils is minimized.
11. Runoff will be diverted away from exposed soils by the use of berms and appropriate grading.
12. The duration of soil exposure will be minimized through the application of appropriate construction scheduling including the re-establishment of vegetation at the earliest opportunity.
13. Construction scheduling will incorporate concepts to minimize erosion during construction of in stream works including