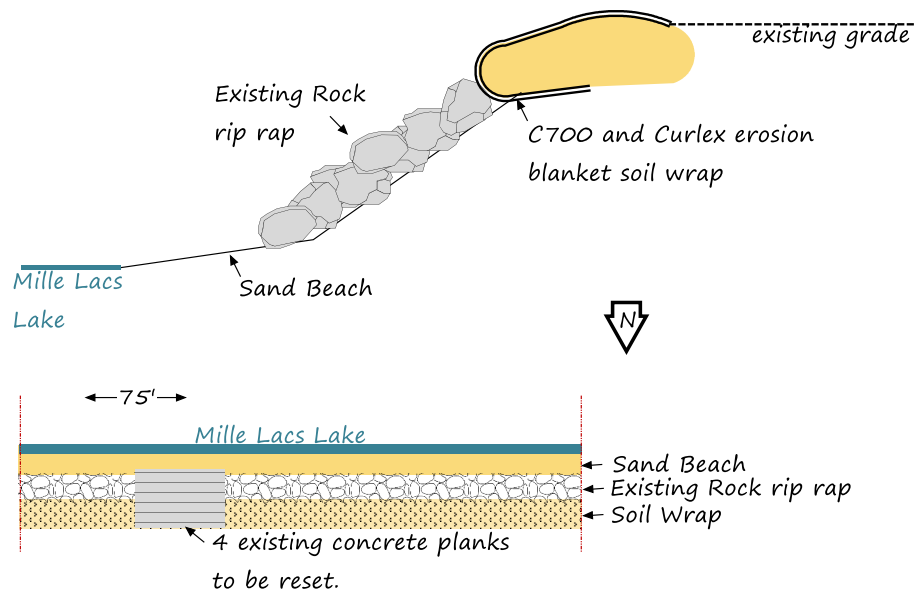


Don Calverley

36149 State HWY 18

Aitkin, MN 56431

Shoreline Bio-Stabilization Restoration Plan



Overview:

The goal of the project is to stabilize 75' of shoreline on Mille Lacs Lake in Aitkin County to repair a past native plant restoration that has been damaged from ice push over the winter and has now been destabilized. Existing rock, C700 Erosion Blanket and Curlex Erosion Blanket will be utilized to re-stabilize the bank to allow for the existing buffer of deep rooted native plants to be re-established for permanent stabilization.

Stabilization:

- Existing native plants and shrubs that have been uprooted from the ice push will be removed from the bank for replanting into the shoreline once the stabilization has been completed.

- The existing rock that has been pushed up the bank will be pulled back lake-ward to their previous location
- A soil wrap will be constructed just above the rock rip rap to stabilize the loose sand that has been moved from the ice push. C700 and Curlex erosion blanket will be placed and staked above the rocks. The loose soil will be pulled onto the blankets. The blankets will be wrapped over the soil and staked.
- 4 Existing concrete blanks will be reset into their previous location on the shoreline.
- Precautions will be taken to not disturb any of the undamaged native plant buffer.

See Hayland Woods planting plan for details.