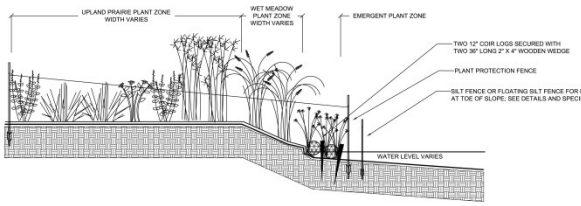
Habitat

Land and Water Stewardship Services Project Profile

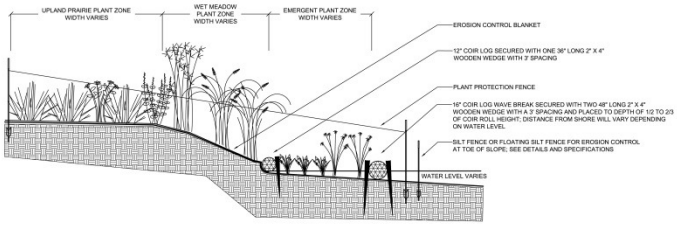
RESTORATION AND RECLAMATION PLANS

Stewsie and Mai'Fete Islands Shoreline Restoration

Northfield, Minnesota
For Carleton College

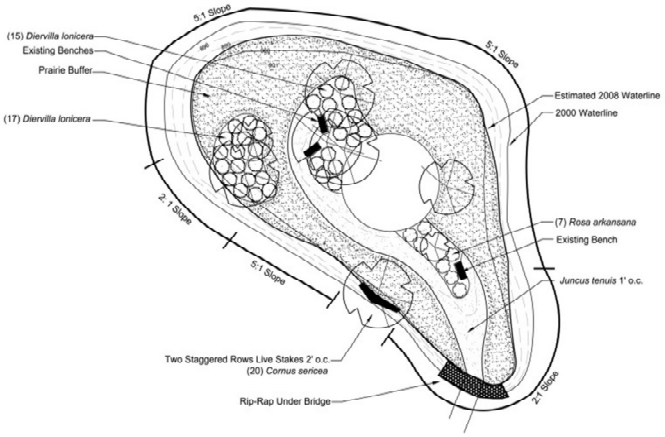


SHORELINE SECTION WITH 2:1 SLOPES (TYP.)



SHORELINE SECTION WITH 5:1 SLOPES AND EMERGENT PLANT ZONE (TYP.)

Stewsie and Mai'fete Islands Shoreline Restoration is a project located in Lyman Lake on the Carleton College campus. Current landscape practices resulted in shoreline erosion and the recession of the shoreline over the past decades.



- In an effort to stabilize the shoreline a native plant buffer zone was installed along the perimeter of each island. A prairie buffer was planted on the upland areas that transitioned to a wet meadow zone along the shoreline. Emergent plants were placed in areas at a water depth that could support them.
- Soil bioengineering techniques such as coir logs were placed at the shoreline edge to hinder erosion and aid in the rebuilding of the shoreline. Coir logs were also positioned farther out into the water to be used as wave breaks for establishing plants.

- Live stakes were installed in areas of extreme erosion to stabilize and rebuild the shoreline.
- Construction details and specifications specific to shoreline stabilization projects communicated proper construction and installation of soil bioengineering and erosion control materials.
- Native plant community models were used to create plant lists that fit the unique conditions along a shoreline gradient.
- Other project benefits include improved water quality, increased native species diversity, and habitat potential.

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