

City of Burnsville Lac Lavon Park Stormwater Retrofit

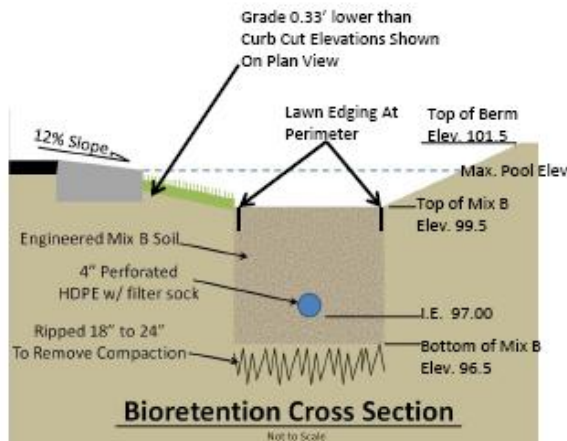


Before

Project: A 625 square foot bioretention cell provides water quality treatment for the first ½ inch of runoff from approximately 0.69 acres of existing parking lot. The wide grass turf areas surrounding the cell provide for snow storage and pretreatment for snowmelt and stormwater runoff.



After



Funding:

Total Project Cost \$ 26,273
Clean Water Fund \$12,871
Landowner \$13,402

Location:

Burnsville
Minnesota



Practice:

Stormwater Retrofit
(Bioretention)

Project Benefits:

Runoff volume reduction
Reduction in Sediment and Phosphorus

Partners:

Minnesota Board of Water and Soil Resources
City of Burnsville

Watershed:

Minnesota River

Construction:
2010



Clean Water Fund:
Protecting and restoring
Minnesota's waters
for generations to come.



City of Burnsville Lac Lavon Park Stormwater Retrofit



An onsite preconstruction meeting was held to coordinate construction sequencing, tree and utility relocations prior to beginning construction.



Over excavation provided soil to construct the confining perimeter berm. The permeability of the underlying soil within the cell was improved by loosening with a toothed bucket.



Backfilling the 70% coarse washed sand and 30% leaf litter compost engineered soil mixture with equipment located outside of the cell avoided construction compaction within the cell.



A 4 inch knife gate valve was installed to allow management of the flow rate and volume of treated stormwater discharged through the subdrain system into an existing catch basin.



Turf areas surrounding the cell provides snow storage and pretreatment of inflows. Using turf sod quickly stabilizes inslopes and swales to minimize erosion and potential sediment contamination of the engineered soil mixture.



Curb cut elevations limit pool depth to 12 inches and provide gutter flow bypass to keep the main cell offline during high flow events. Perimeter sod, lawn edging, a layer of shredded wood mulch, and a native shrub planting complete the cell.