

VEGETATION REPLACEMENT STRATEGY

DRUMHELLER RESILIENCY & FLOOD MITIGATION PROGRAM

July 2023

As part of each berm project, a tree inventory/assessment is conducted to document the species, location, quantity, and condition (health) within the project extents. As the project teams work through berm alignment and design, maintaining existing healthy vegetation and minimizing the impact of the berm construction and ultimate footprint to properties and surroundings are key priorities.

In cases where existing trees need to be removed to accommodate the new flood protection systems, each berm project includes a revegetation strategy, informed by the recommendations of the *Drumheller Valley Preserving & Enhancing the Urban Forest: Standards & Techniques (2021)*. The following principles are used to guide the vegetation design for each individual berm project:

- maintain berm integrity - avoid planting within the footprint of the berm
- 5:1 replacement ratio - for each tree removed (in fair, good, or excellent condition), replace with 5 trees and/or shrubs
- design for biodiversity - plant a range of species to promote long-term success and resiliency
- enhance existing plant communities - propose new trees & shrubs that are similar to those that are currently thriving; this varies by location and specific context
- specify appropriate species - plant only trees & shrubs that are native and/or adapted to local climate
- maintain existing resident views - avoid planting large trees directly behind residences with existing views to the Red Deer River
- improve public spaces - enhance town green spaces with tree & shrub plantings, where feasible

PRIVATE TREES

What does this mean for trees that must be removed from private property? As part of the berm revegetation strategy, the project will aim to accomplish the following:

- propose one new tree (size = #15 container) for each private tree removed, to be located on affected private property*;
- coordinate with affected landowner to select a species and to confirm location – both species and location must comply with principles noted above;
- coordinate with affected landowner for suitable timing, clear access, and planting bed preparation for installation of plant material; and
- install plant material in accordance with project specifications.

** Should affected landowner choose not to have replacement trees or shrubs located within their property, all plant material will be located on public property as part of the overall revegetation strategy.*

Maintenance Responsibilities:

- Private landowner will be responsible for all ongoing maintenance for trees and/or shrubs located on their private property following installation; maintenance activities include, but are not limited to, watering, beaver protection, pruning, etc.