

Lot 16 Streambank Stabilization

Lot 16 is a 10-acre parcel of land accessible from the Claire Court cul-de-sac and the south end of the Techny Basin and West Fork asphalt paths. Before Village acquisition, Lot 16 was an unmanaged field marketed as a buildable lot as part of the nearby industrial park. A portion of the lot adjacent to the West Fork of the North Branch of the Chicago River had become severely eroded and begun to slump (see picture).

Lot 16 is part of a larger complex of open space parcels near the West Fork. In many portions of this area, native vegetation has been installed to provide low-maintenance, aesthetically pleasing landscaping, slope stabilization and natural habitat. The area, known informally as the "Techny Basin Complex" - including Techny Basin, Lot 16, the North Navy Ditch, and a portion of the West Fork - has been recognized by local zoning ordinance as an Environmentally Significant Area. This designation constrains development projects in the area.

The Lot 16 restoration project encompasses streambank stabilization, in-stream habitat and upland habitat, all of which contribute to improved water quality. Streambank stabilization consisted of: regrading the streambank; installing soil lifts planted with willow stakes; stabilizing the toe of the slope using rock, coir log and wetland seed; and planting the streambank with native species, including herbaceous species in less severely eroded locations and woody species such as willow, buttonbush or dogwood in the regraded locations. A total of 310 linear feet of streambank were stabilized through the project. To reinforce the water quality and stability benefits, native prairie seed was installed on uplands disturbed during the regrading. In-stream improvements included construction of a rock vane to redirect stream flows to the center of the channel and installation of two riffle/pool structures for stream aeration and habitat diversity.



Top: Slumping streambank at Lot 16
Bottom: Restoration construction in progress

Location: Bounded by Techny Basin and the West Fork on the north, North Navy Ditch on the west, Valley Lo golf course on the south, and the West Fork on the east.

Start of construction: May 23, 2007

Construction complete: June 19, 2007

Benefits:

- Less pollutants through reduced erosion
- Enhanced riparian and upland habitat
- Aeration from pool-and-riffle turbulence and velocity changes increases aquatic habitat diversity

Pool-and-riffle structure: In a stream, areas of shallow coarse material over which water flows rapidly (riffles) alternating with deeper, calmer areas (pools).

Rock vane: Stream structure used to redirect stream flows away from banks.

Coir Log: Tightly bound cylinders of coir fiber (coconut fiber) placed at the toe of the streambank to help minimize erosion



The Village of
Glenview