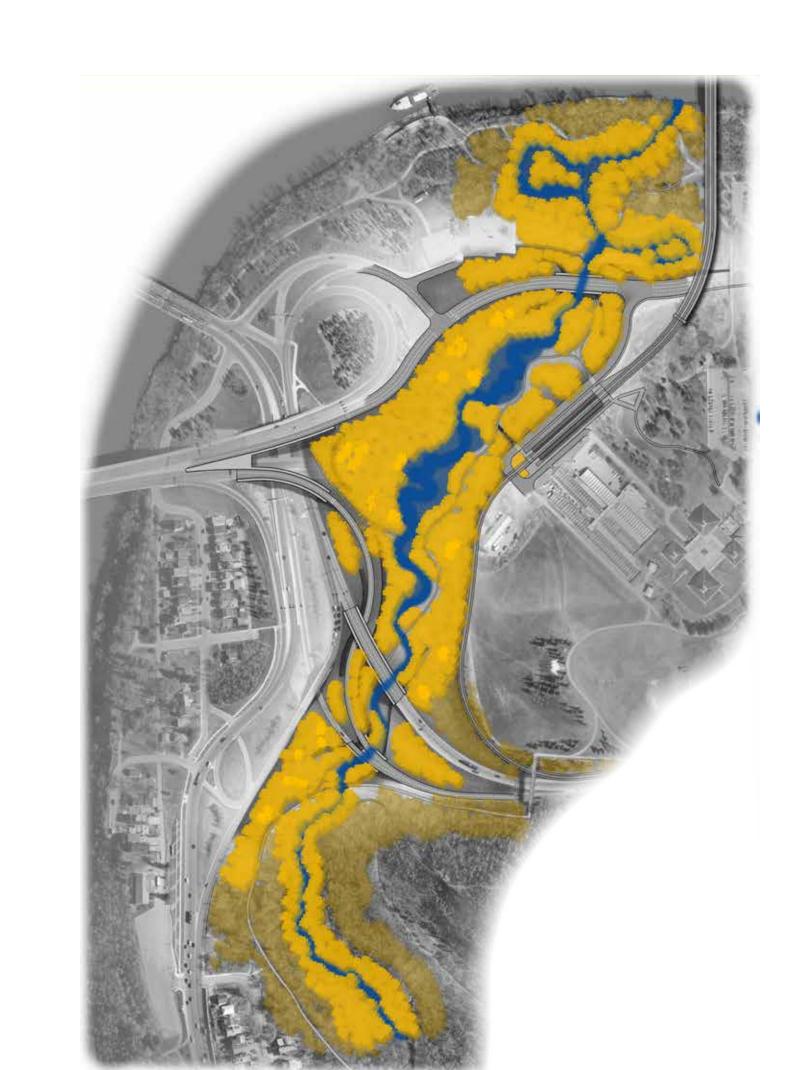
Concept 1: Ecology Focus



Biophysical Network

ecological function. It fully restores ecological connectivity between Mill Creek Ravine and North Saskatchewan River, as it creates the widest, highestfunctioning corridor with significant natural terrestrial habitat on both sides of the creek. With the highest number of wetlands of the three concepts, wetlands, this concept provides for the greatest aquatic biodiversity, the most abundant fish cover and the richest aquatic food chain. Habitat diversity is high: flowing water, gravel riffles, still water, emergent marsh, riparian grass, shrubs, mature forest, young forest. With the combination of abundant, diverse habitat and low disturbance, this concept is expected to support the highest biodiversity.



Recreational and Cultural Opportunities

his concept intends to return as much available space to a natural state as possible. Recreational opportunities are limited primarily to passive activities such as walking and birdwatching. Quiet seating areas provide respite from the activity of the

Wildlife information boards would be located in strategic areas to highlight plant and animal species found in the newly restored creek. Cultural information on Edmonton's First Nations and later settlement history would be highlighted.



Road Network

In this concept the road connection between James McDonald bridge and Connors road is adjusted to increase the available area for the creek to flow. The connection between James McDonald and 98th Avenue is also consolidated and moved to the north, allowing for an increase in the usable space between



Trail Network

The trail network in this concept is limited to a single trial connecting the existing south end of Mill Creek to the existing trail network adjacent to the river.

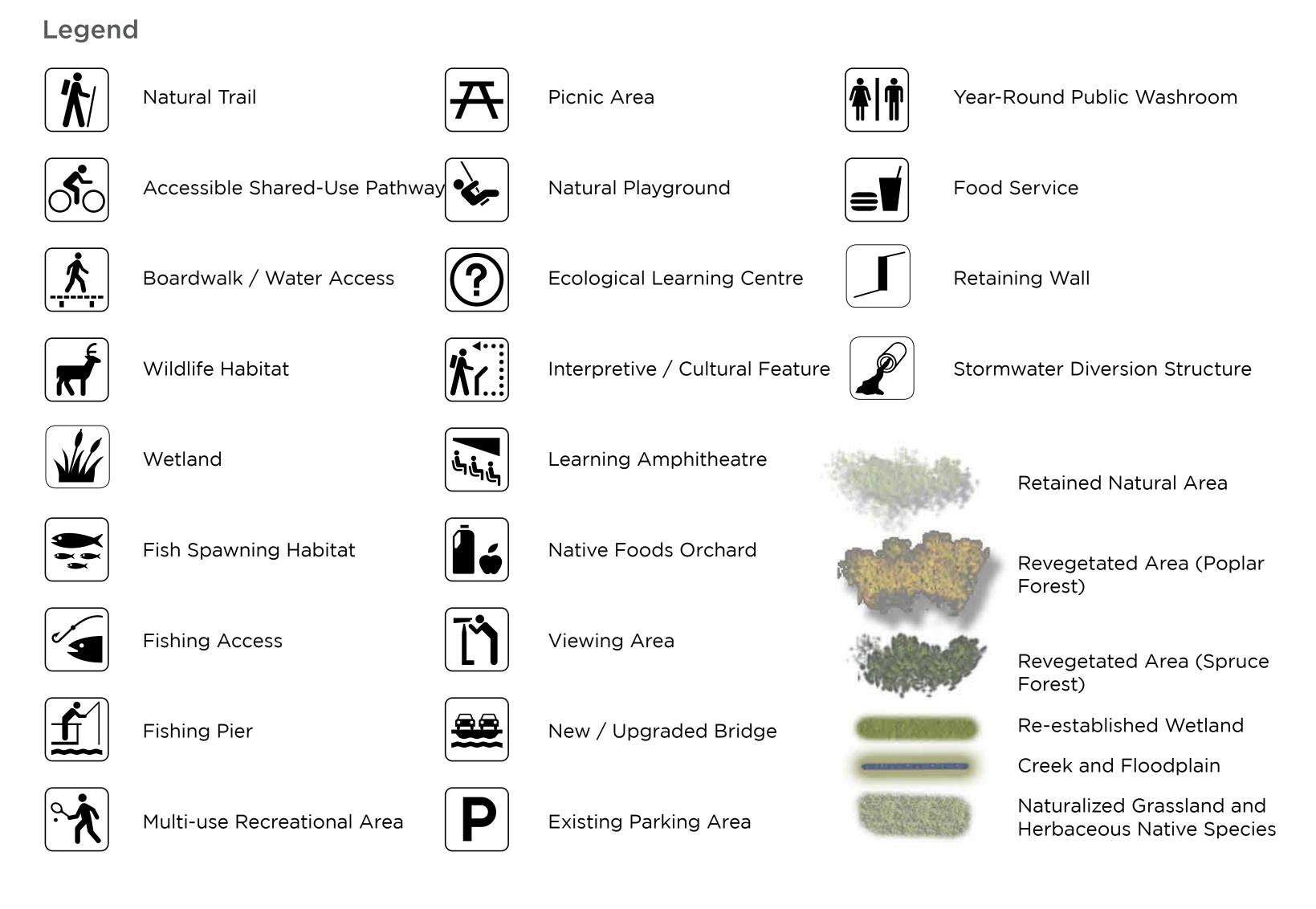
Trial construction is limited to a simple granular trail with minimal creek crossings.



Retaining Structures

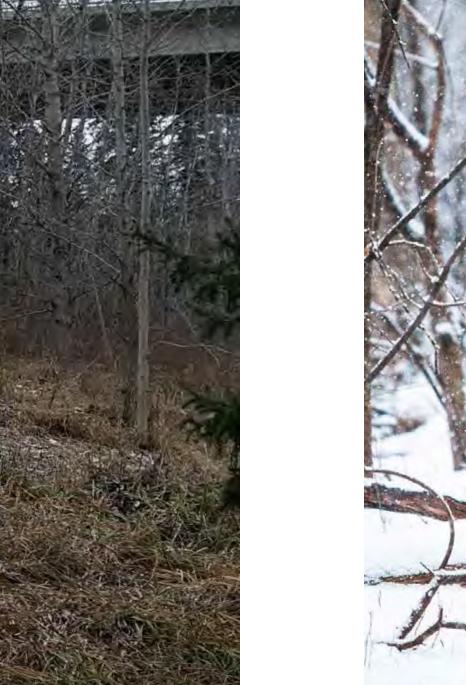
Retaining structures are required in this concept, with the most significant structure being adjacent to the James McDonald Connors Road east connection. Road underpasses are wide and high enough to

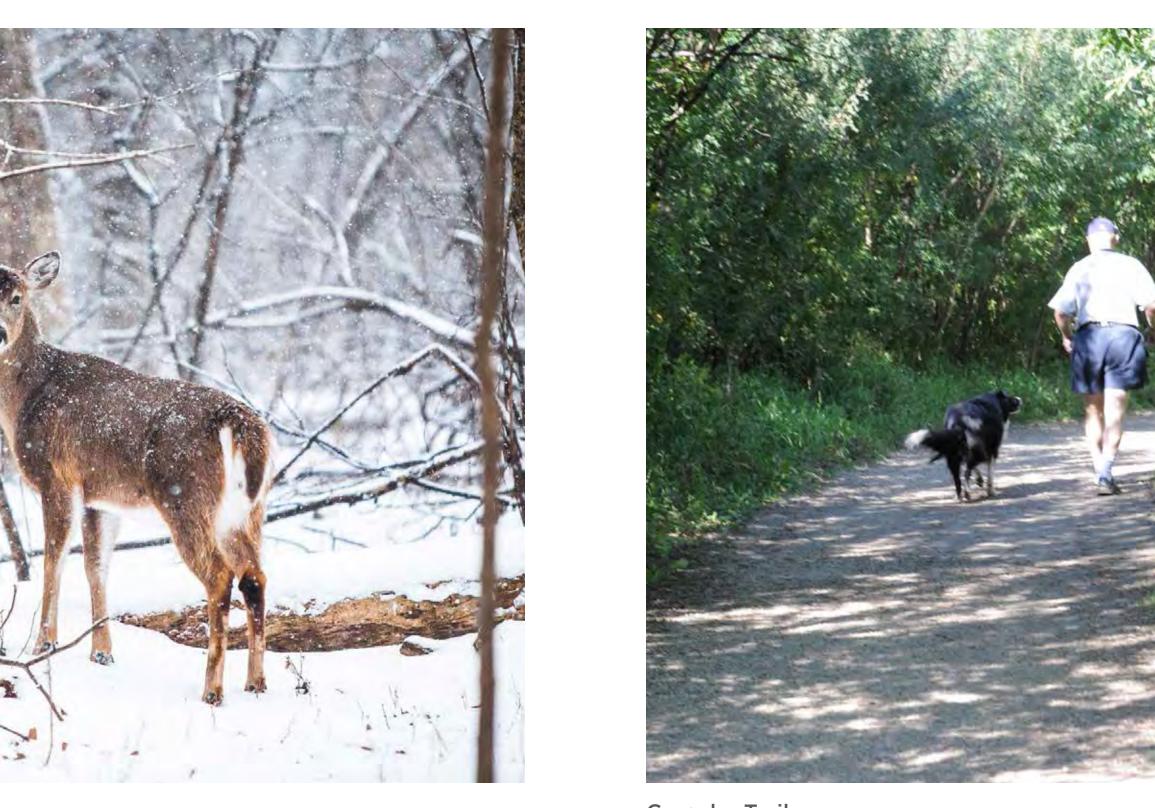
accommodate deer, the granular trail, and the creek.







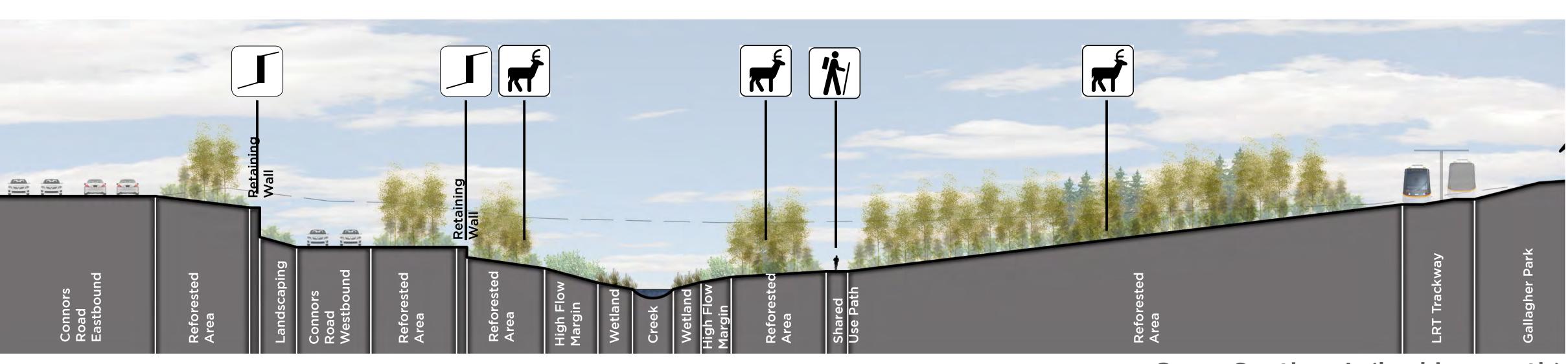




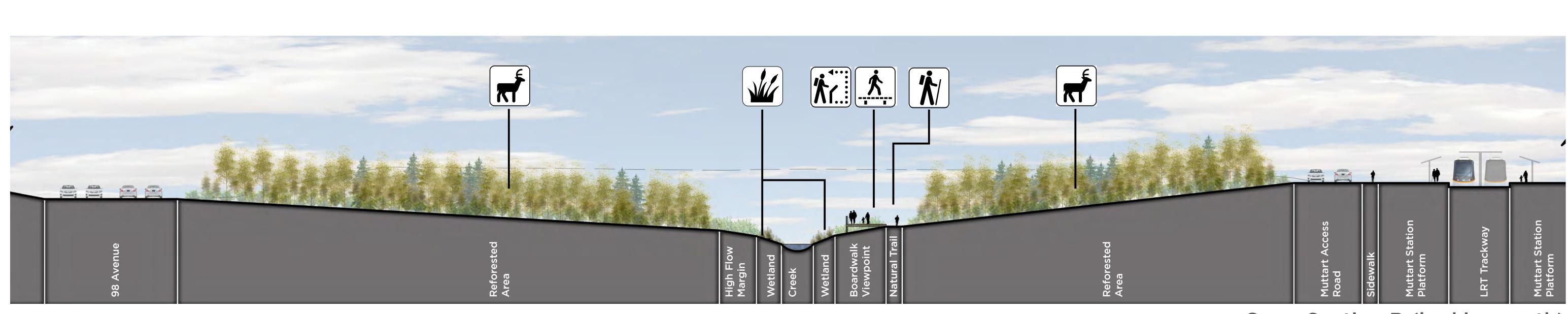
Bird's-Eye View Looking South East Towards the **Muttart Conservatory**



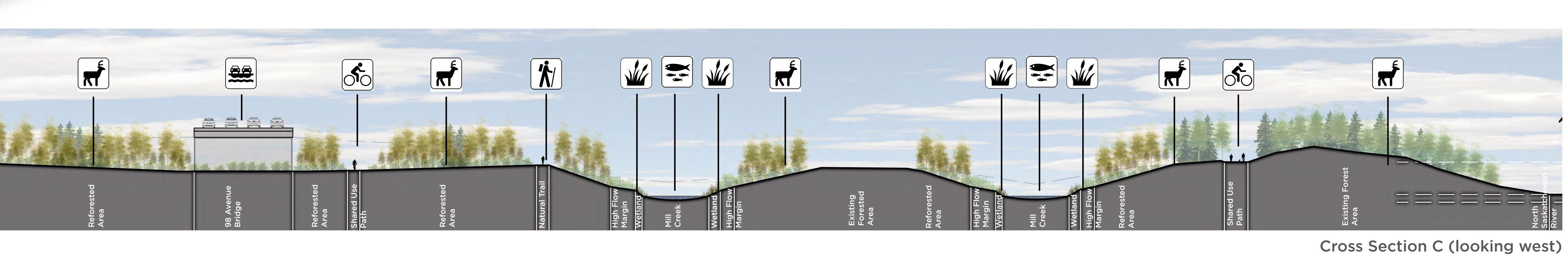
Bird's-Eye View Looking North Towards the River



Cross Section A (looking north)



Cross Section B (looking north)





Concept 2: Trail Connectivity Focus



Biophysical Network

This concept places priority on ecological function west of the creek and provides for a variety of recreational trails and associated uses. Wetlands and sh spawning habitat are provided north of 98th Avenue and, to a lesser degree, near the Muttart Conservatory. The naturalized corridor is narrower, which causes the creek to become less sinuous and shorter. Habitat diversity is high yet slightly lower than in the ecology focus concept.



Recreational and Cultural Opportunities

cycling, running, and walking. Space for benches and picnic tables is incorporated at a small lawn space

A boardwalk area along a wetland near the creek provides a location for interpretive signage to explain plants and animals that can be found in the area.



Road Network

In this concept, existing road connections are maintained with the exception of the James McDonald Bridge/98th Ave connection. Consolidating the roads connecting to James McDonald Bridge to 98th Ave helps to reduce the number of bridges to be constructed and helps to reduce the extent of retaining walls required.



Trail Network

The trail network provides extensive connections between the existing trial system and the new trails adjacent to the creek. The new trails connect with the existing paved trails to the north and would tie in to the existing paved trail at the south. Existing connections to the Connors Road bridge remain in

Connections to the new Muttart LRT station would provide opportunities for access to the Mill Creek trail system from areas served by the LRT.

The trial minimises curved sections to help to increase the traveling efficiency for commuting cyclists accessing downtown from Mill Creek. Trial construction would be an asphalt shared use path with several creek crossings.

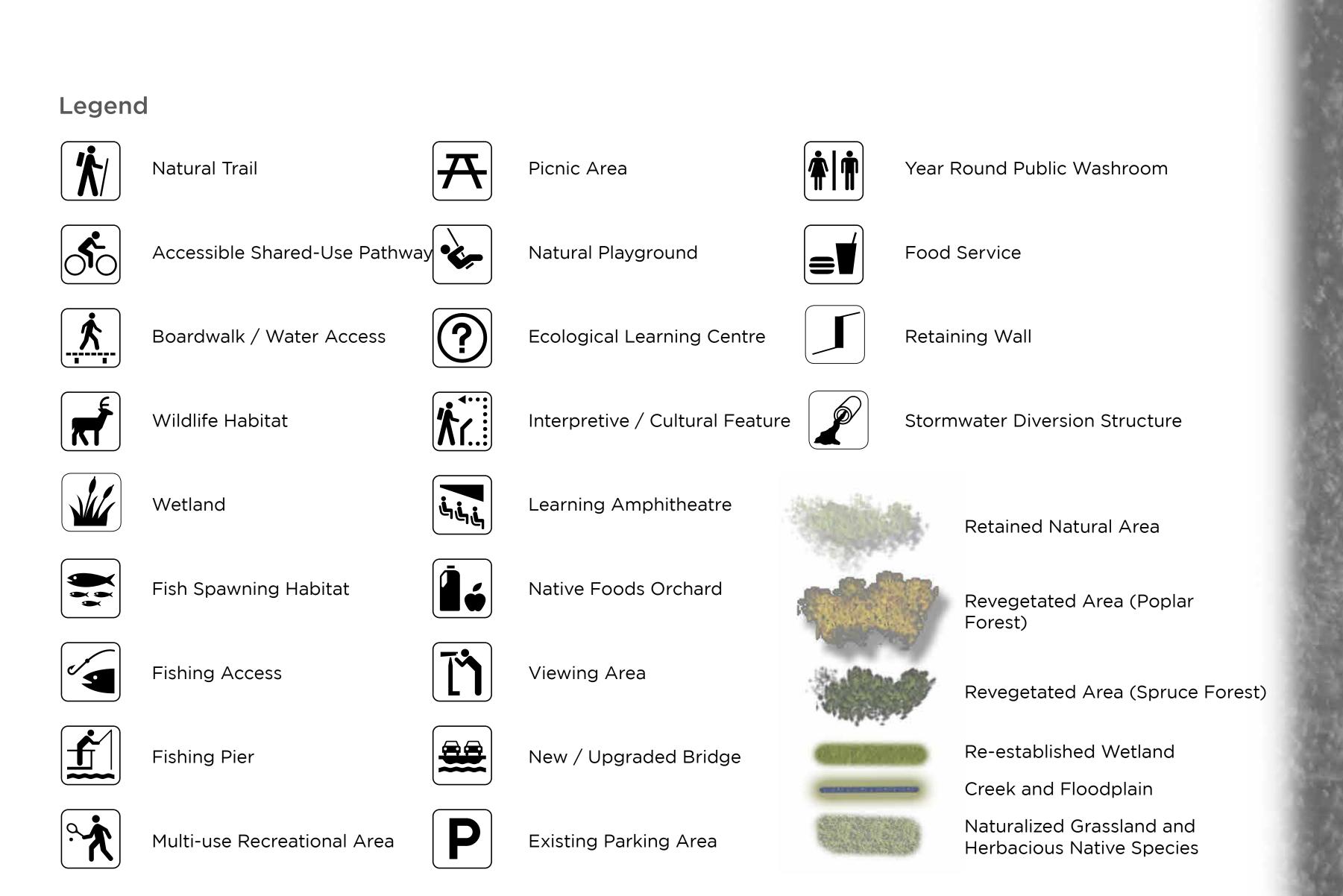


Retaining Structures

Retaining wall structures are required in this concept due to the lowering of grades necessary to accommodate the creek. Retaining wall structures occur predominantly near bridges and other areas where the grade cannot be sloped gently.

This concept requires the most extensive amount of retaining structures due to the retention of the

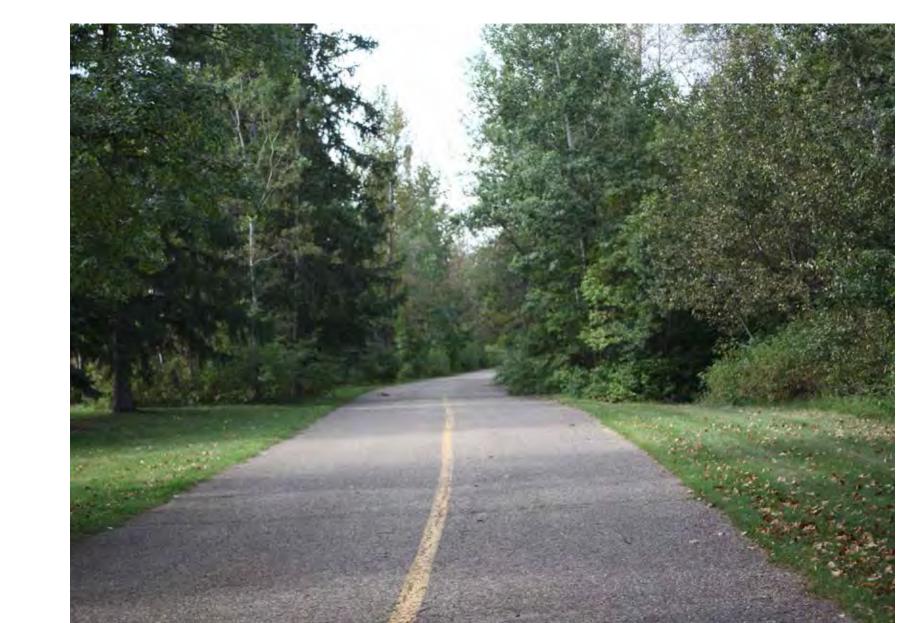
Road underpasses are able to accommodate cyclists, walkers, and some wildlife.









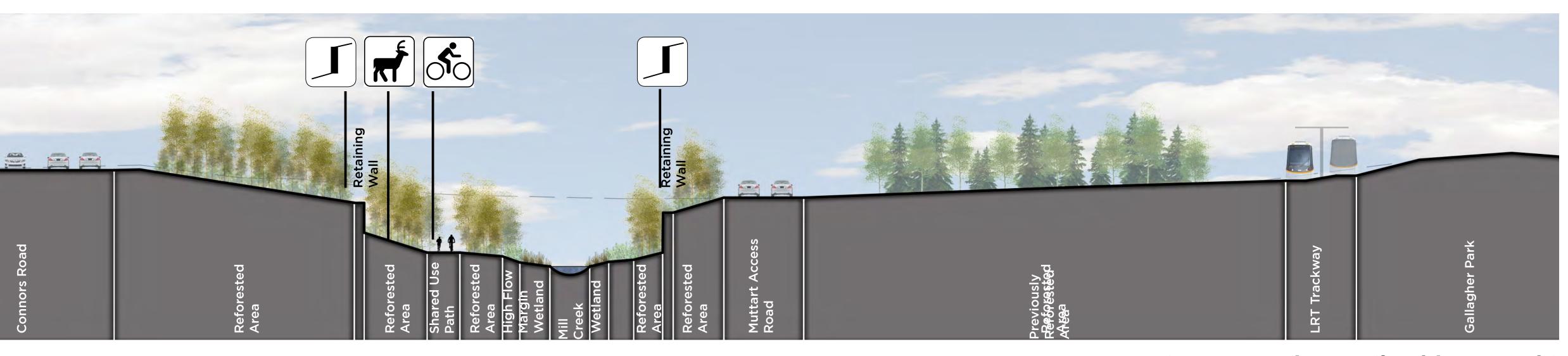




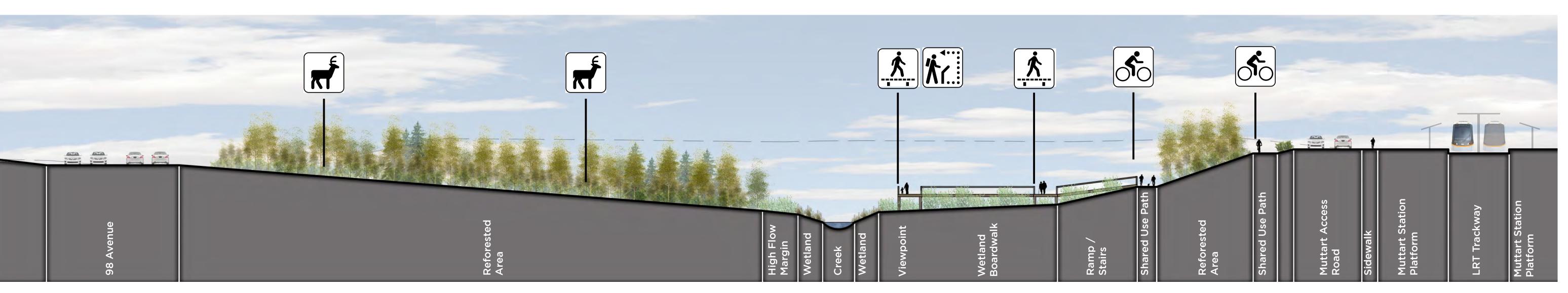
Bird's-Eye View Looking South East Towards the **Muttart Conservatory**



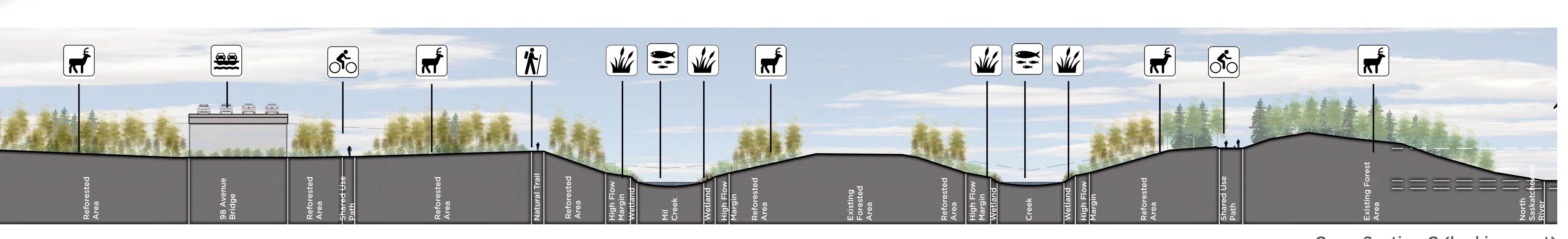
Bird's-Eye View Looking North Towards the River



Cross Section A (looking north)



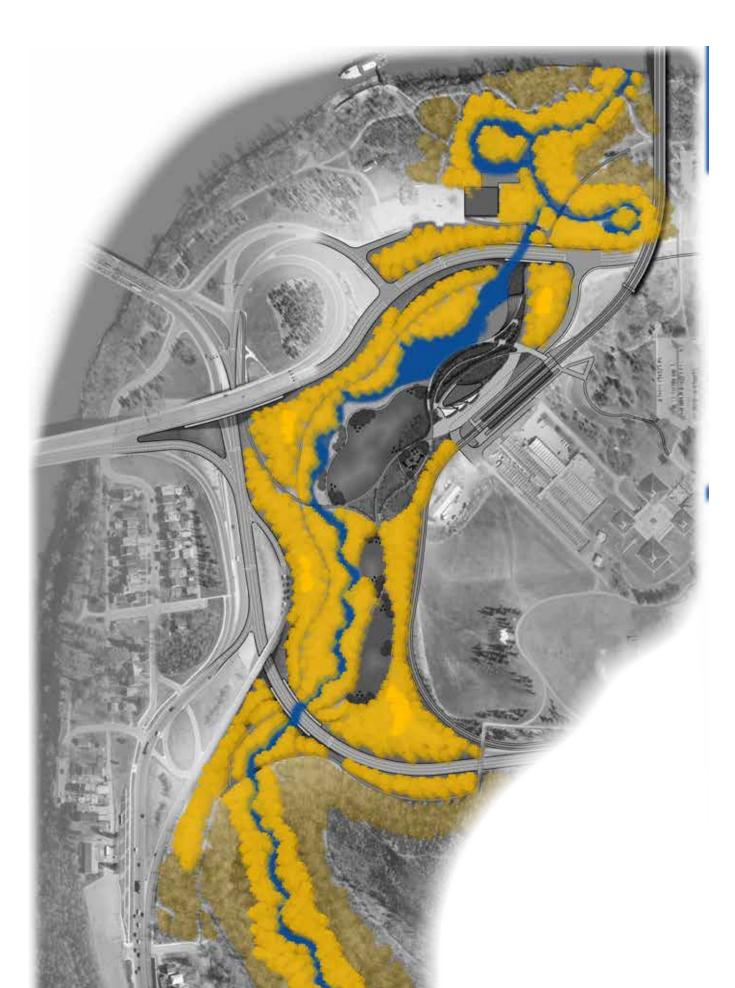
Cross Section B (looking north)



Cross Section C (looking west)



Concept 3: Destination Park Focus



Biophysical Network

In this concept the re-established corridor is very wide and road crossings are reduced to two.

However; the naturalized movement corridor is narrow and limited to west of the creek only. Wetlands and fish spawning habitat are provided north of 98 Avenue. Habitat diversity remains high but natural habitat is least abundant compared to other concepts. Recreational use may deter some wildlife species from inhabiting the ravine.



Recreational and Cultural Opportunities

This concept presents the greatest variety of passive and active recreational opportunitie found frequently along the length of the newly daylighted creek.

A combination of ramps and stairs connects the multi-use trail to the LRT station. Seating is integrated into the plaza; providing quiet areas for reading and resting. Viewpoints will be created where visitors can overlook the park below and enjoy displays about the cultura and historical significance of the area.

Decorative lighting and art pieces are part of the plaza space and act as beacons highlighting the location of the station and the park from the north side of the river.

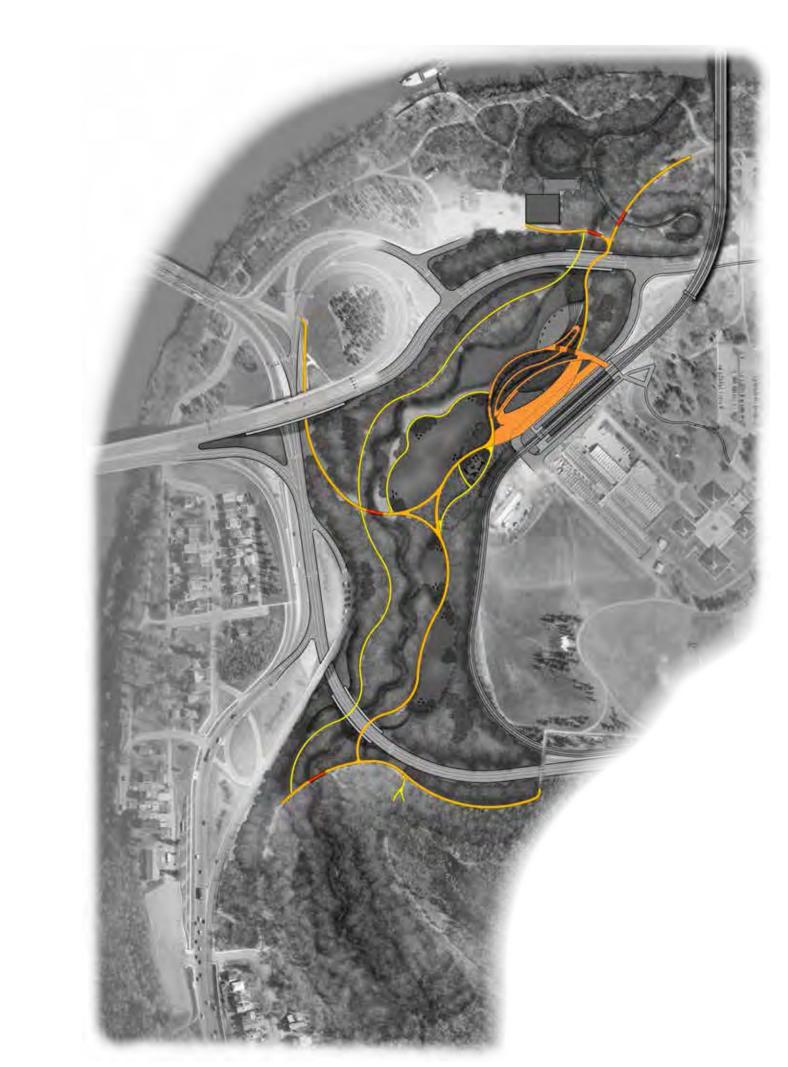
A large, open, grass, area provides opportunities for casual sports and recreation, along with smaller open spaces located further upstream from the main park space. A ring of picnic spots, fire pits, and shelters surrounds the open space. Nearby a natural play area provides a space for children to actively engage in nature through play.

The north end of the creek features a new ecological learning centre where different groups can take advantage of educational opportunities. A boardwalk area overlooks the remnant oxbow, where children can learn about the plants and animals that live in Mill Creek and the North Saskatchewan River. Fishing and non-motorised boating from the boardwalk are encouraged.



Road Network

This concept presents the most extensive re-design of the road network by consolidating traffic over fewer bridges, allowing for more open land to be used for park space. Controlled intersections replace free flow lanes to enable road lane consolidation.



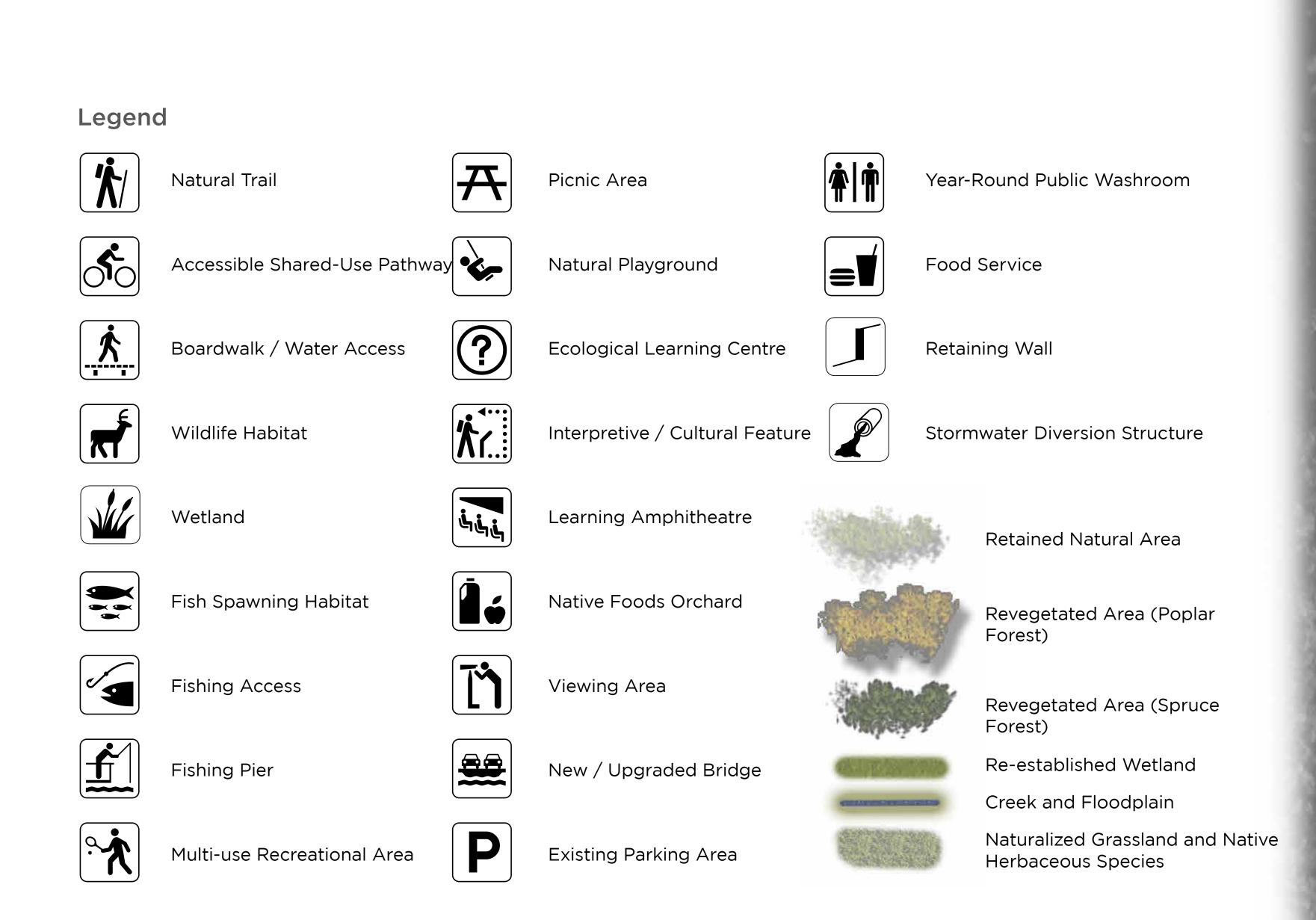
Trail Network

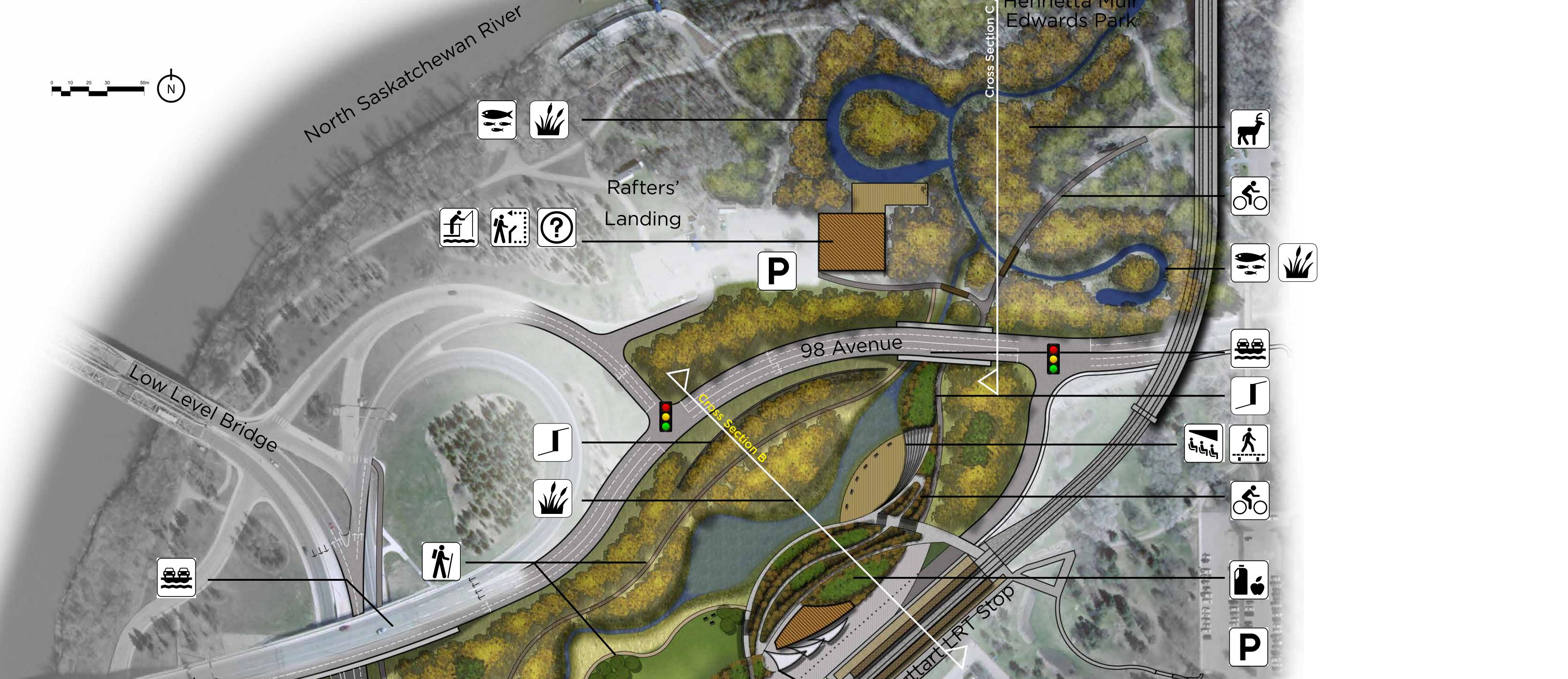
This concept presents several opportunities for trails and trail connections. A connection between the existing paved trails to the south and north is created. On the opposite bank of the creek, a granular trial connects to existing granular trails to the north and south. Bridges cross the creek at multiple points, providing opportunities for viewing the creek and its wildlife. Trail connectivity to the LRT station is emphasised by the built elements of the station and adjacent walkways.



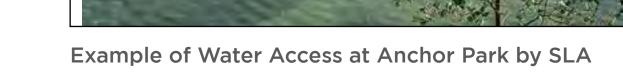
Retaining Structures

Retaining structures are minimised in this concept as the greater open space allows for gentle slopes from the roadway down to the creek. All underpasses accommodate cyclists, large wildlife, and the creek.











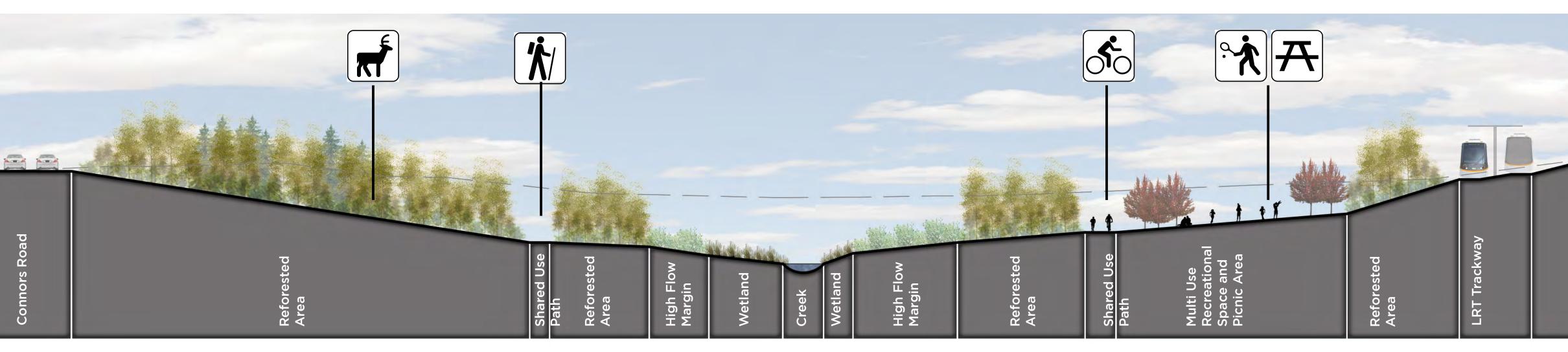
Example of Nature Play at Garden City Play Environme Space2Place



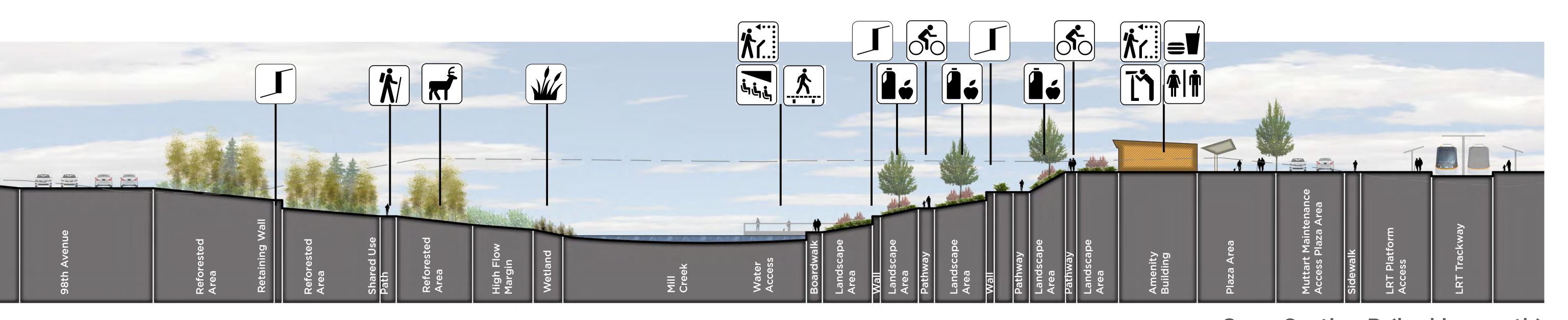
Bird's-Eye View Looking South East Towards the Muttart Conservatory



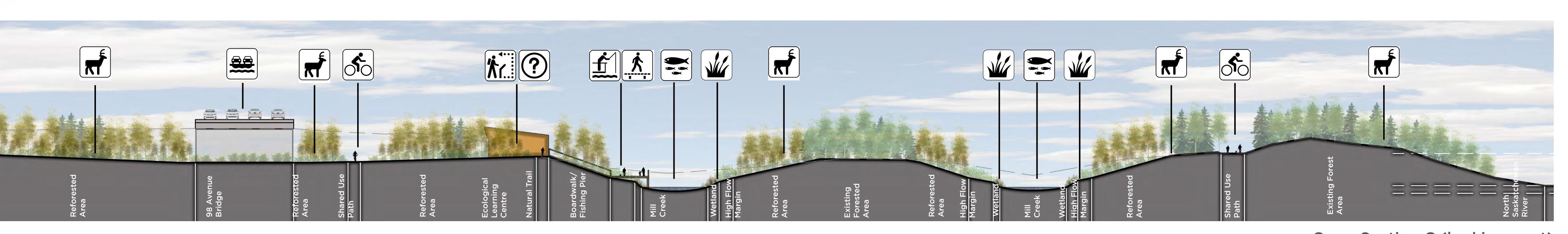
Bird's-Eye View Looking North Towards the River



Cross Section A (looking north)



Cross Section B (looking north)



Cross Section C (looking west)

