

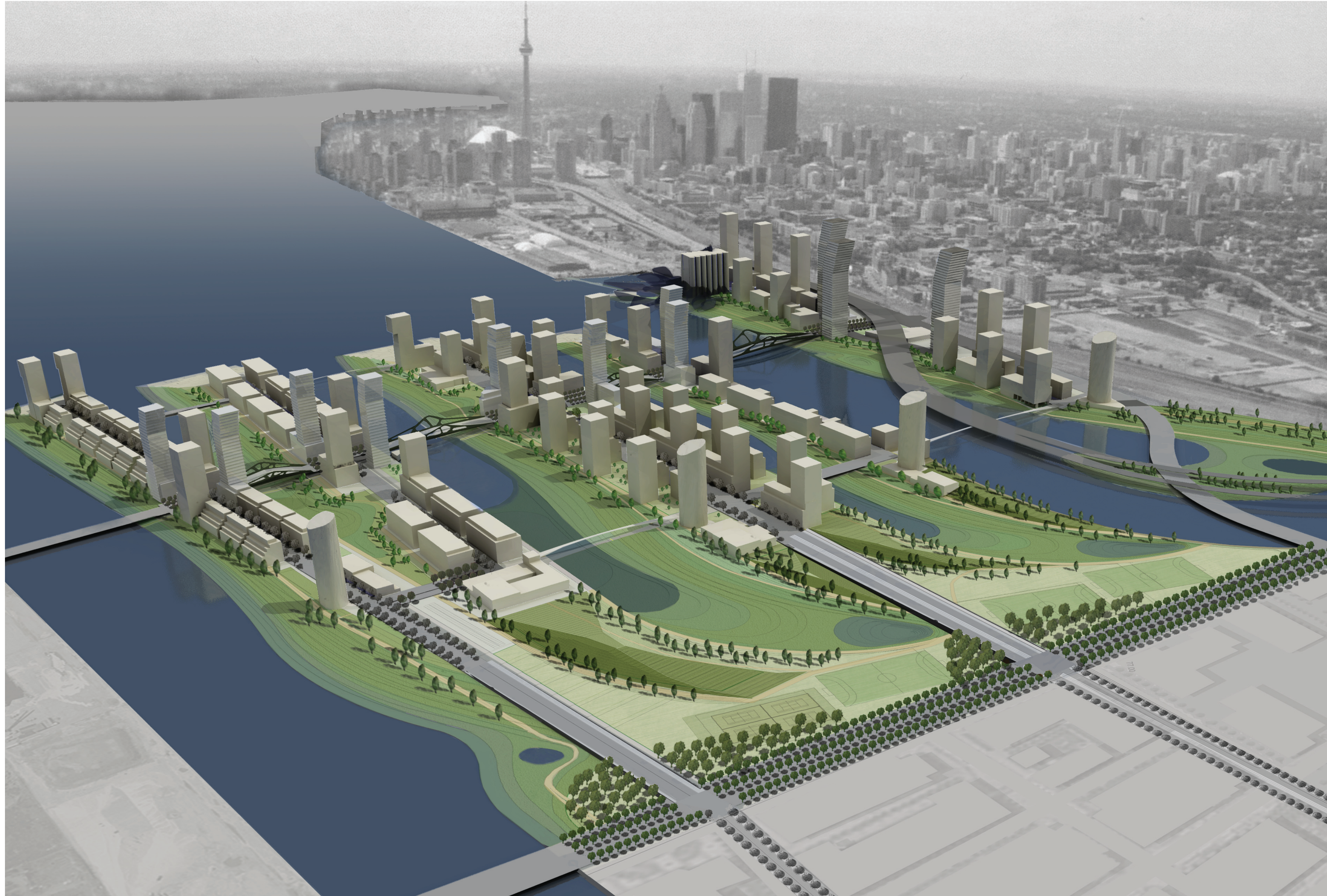
# DON MOUTH PARK TORONTO



Don River-flow L-principle



Key to a continuous waterfront park system



Don Mouth Park & Downtown



City urban-flow L-principle



Don Mouth Park river-flow meets urban-flow

## INTRODUCTION

Toronto's Don Mouth Park  
*Towards a sustainable water-based landscape for living*

Can natural landscape regeneration go hand in hand with dense new urban growth successfully? This is challenge posed by Toronto's Lower Don Lands Innovative Design Competition.

We believe that a new form of city in the Lower Don Lands that can actively contribute to the improvement of the immediate environment of the Don River and Inner Harbour by fostering a more direct form of stewardship of nature.

We believe that the Don Mouth Park project can recover this estuarine area to produce a sustainable neighborhood of outstanding environmental and urban quality for Toronto. We imagine Don Mouth Park as the first truly water based city in the Toronto agglomeration, as a landmark for an entirely new form of civility, where a responsible approach to the environment coupled with applied methods of sustainable living could create an appropriate model for the city of the 21st Century.

The Don Mouth Park is thought of as a catalyst of value with a mutual reciprocity in both economic and ecological terms. The fundamental convergence of interests in economy, ecology and leisure, means that this project will be capable of generating a much needed environmental regeneration of the Don Mouth, while providing outstanding amenity value for appropriate development.

The direct correlation between a dense living environment and its immediate natural environment will help foster a new way of living, where the Don Mouth Park landscape becomes the direct expression of a particular form of urbanity. Instead of landscape and city being juxtaposed to one another, they will complete each other symbiotically.

Substantial topological and morphological transformations are needed to enable sustainable environmental improvements to happen in the Don Mouth Park. These topographical changes are based on a specific understanding of the dynamics of the Don River and its history of sedimentation, with mouth patterns that have repetitively led to a west-facing L shaped configuration over time.

In the event of a major flood the water overflowing from the Don Mouth into the Greenway would be channeled via a system of "green claws" into the "ecological slips" located between each bank. The systematic repetition of this L shaped pattern considerably reduces the risks of flooding and increases overall urban contact to the waterfront fourfold. Seen in a dynamic perspective the Don Mouth Park will have up to four "arms" conveying water through to the Inner Harbour in the event of major floods. The "spreading" of such waters will also help reduce the process of siltation in the Inner Harbour.

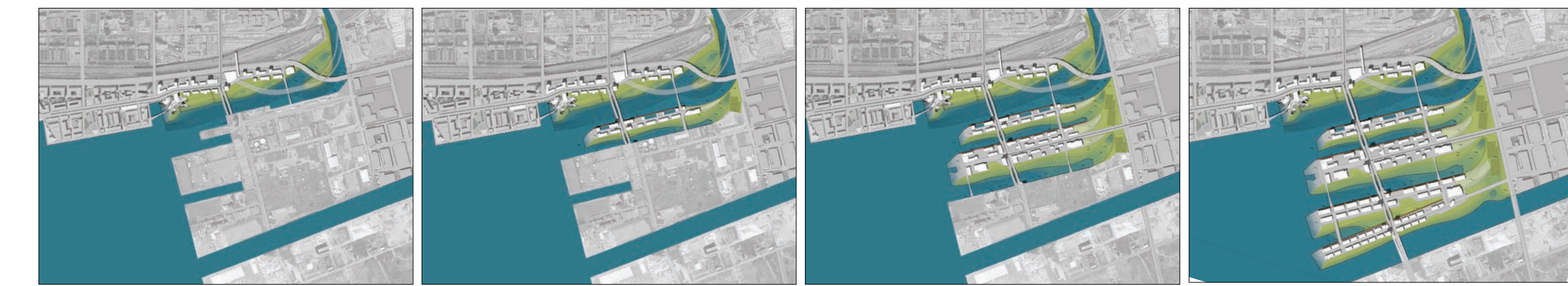
New institutions such as the Don Mouth Aquarium, a gateway to the Don Mouth Park the Don Mouth Aquarium - incorporates the Victory Grain Silos - will serve as a cultural attractor and as a landmark that links the site with the rest of the Toronto Waterfront.

The Don Mouth Park is to become a vast leisure ground for all Torontonians accessible to the general public via public transport and alternative walk and bike routes. It remedies and controls water, but also provides a sanctuary for wildlife, enabling a more accessible contact to nature for its inhabitants. The challenge posed by the exigencies of a new sustainable city and its landscape necessarily results in a skilled balancing act between built form and nature, between a variety of flows and fixed points. In this precise instance only, will the culture of nature and that of the city finally merge and become one with the promise of an enriched environment for the benefit of all.

## TEAM

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Office Of Landscape Morphology  
Philip Ursprung  
ReK Productions

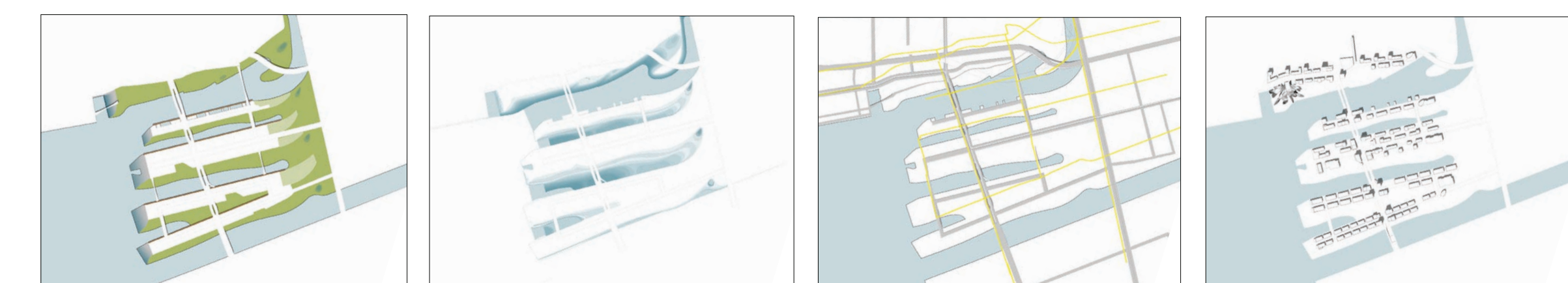
## PROJECT PHASES



PHASE 1 North Don Bank  
PHASE 2 Keating Bank  
PHASE 3 Commissioners Bank  
PHASE 4 Polson Bank, New Basin Bank

We propose to organize the development of the Don Mouth Park into a series of consecutive project "modeling" phases. Each phase will consist in the precise carving-out of a "finger" or bank that replicates the L shaped pattern of the river mouth in the shallows of the Don Greenway tract. Each bank will have a boardwalk to the north enabling a variety of water related activities such as canoeing, rowing, sailing, boating, fishing. To the south of each bank an ecological slip will allow for strong natural regeneration to take place, and will essentially be a wading environment.

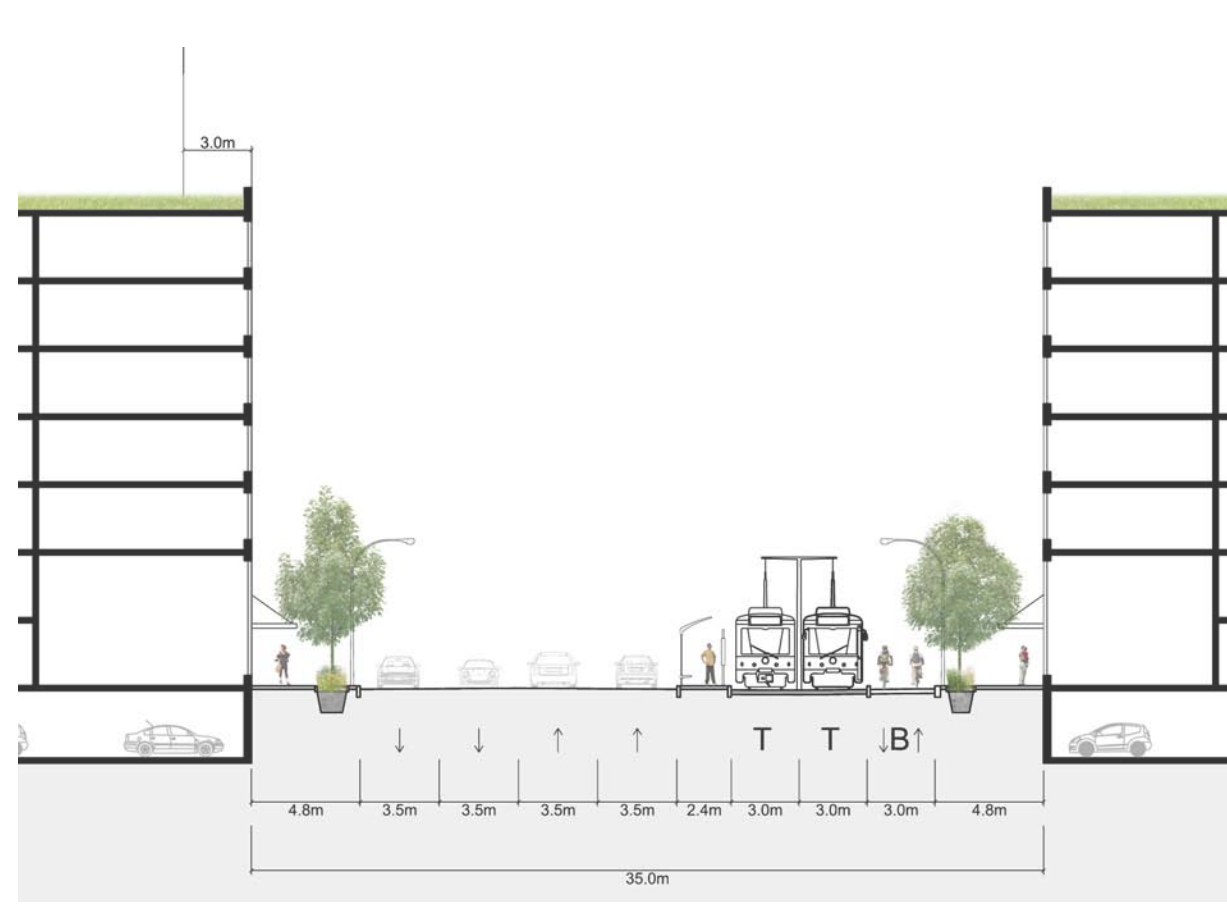
## SURFACE RATIOS



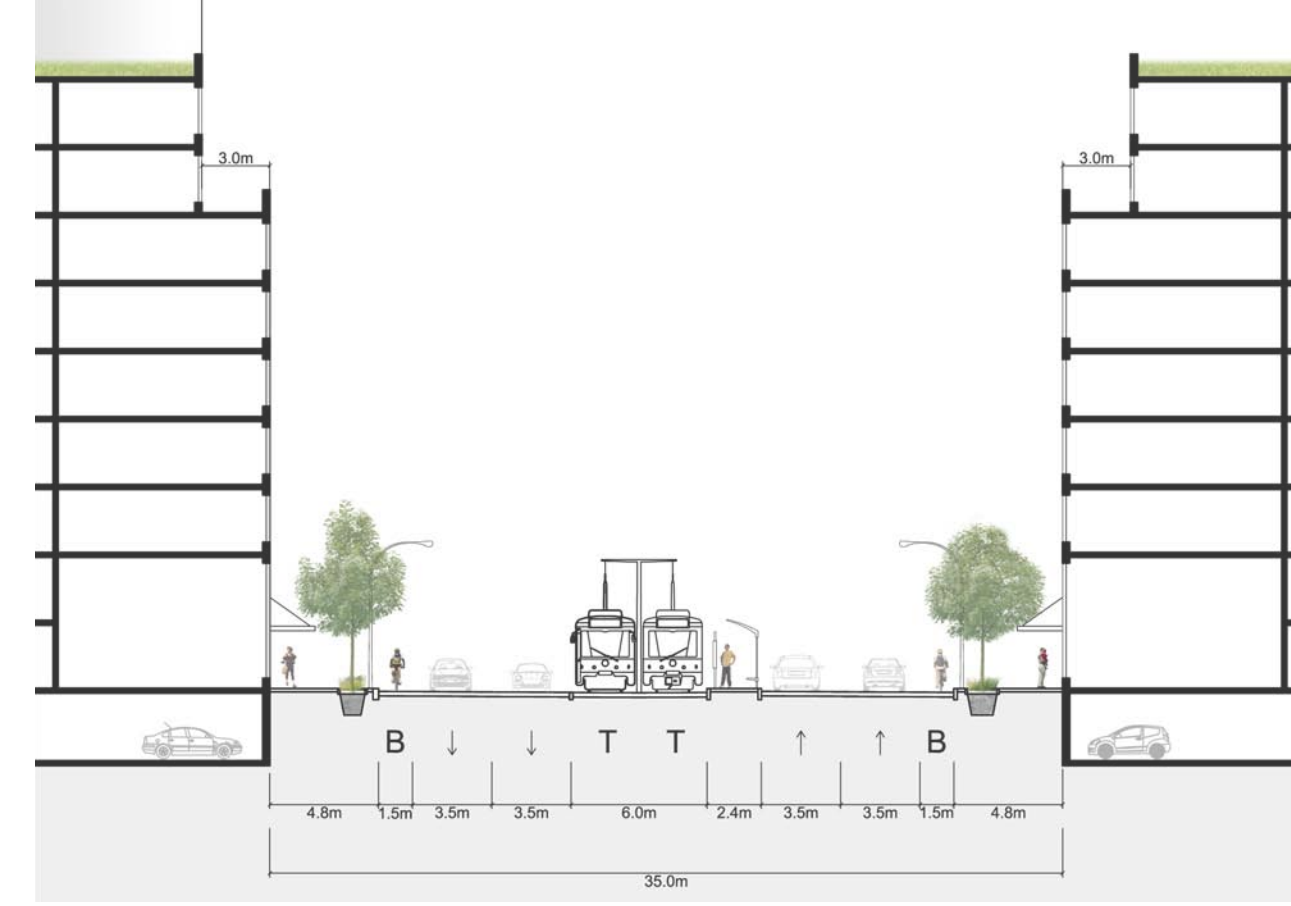
40% LANDSCAPE / PUBLIC SPACE  
20% WATER  
20% ROADS / BRIDGES  
20% BUILDINGS

Each bank will consist predominantly of a low building mass punctuated occasionally by slender high-rises. The main concentration of high-rise buildings will be along Cherry street and away from the more public waterfront areas. The total built surface in the Don Mouth Park will occupy less than 20 % of the project area. Another 20% of the project area will serve for roads and bridges. The remaining 60% will essentially be landscape (40%) and water (20%). The entire Grey water and storm water system of the new city will percolate directly into the reticulate system of the "ecological slips" and their wetlands. This will help provide substantial improvement in the water quality of the Toronto Inner Harbour. Lawn areas will be kept to a minimum in and around sports fields as well as some public spaces. This sustainable city will be best exemplified by the "Green Towers" strewn along the Don Greenway showing the use of appropriate technology in matters of water, energy, plants and materials.

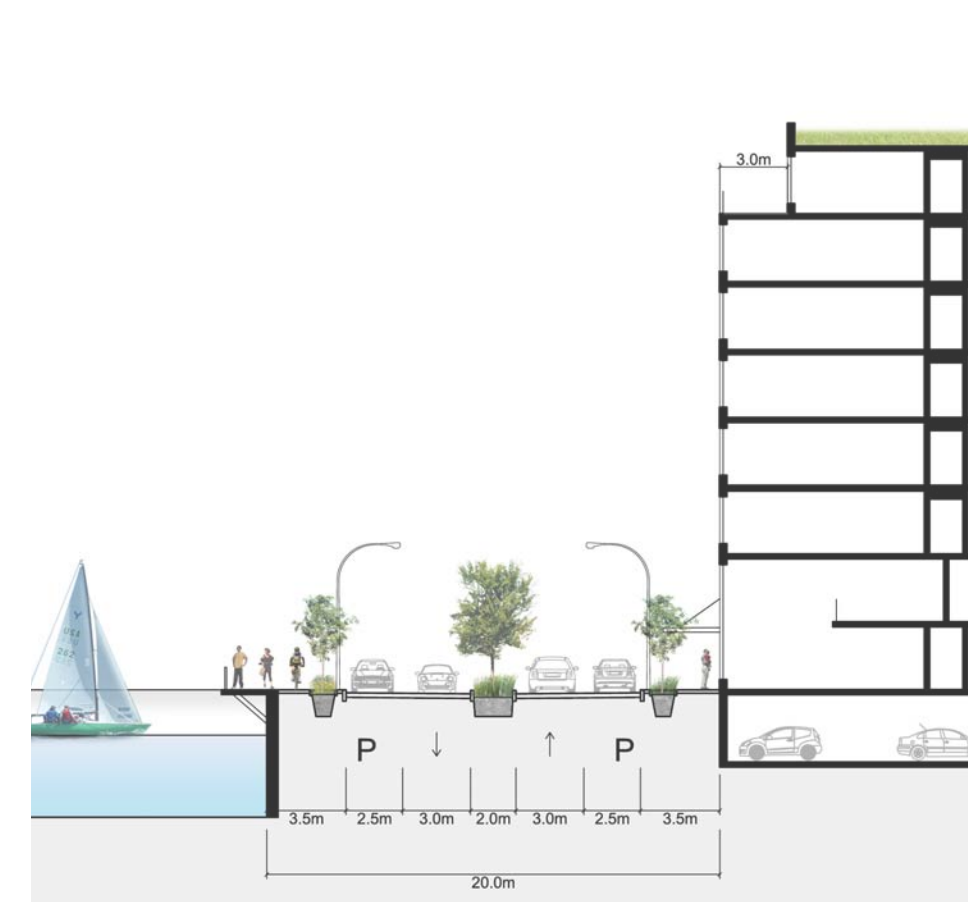
# DON MOUTH PARK CITY



Queens quay



Cherry street



Villers street



Commissioners street



Night view Don Mouth Park City



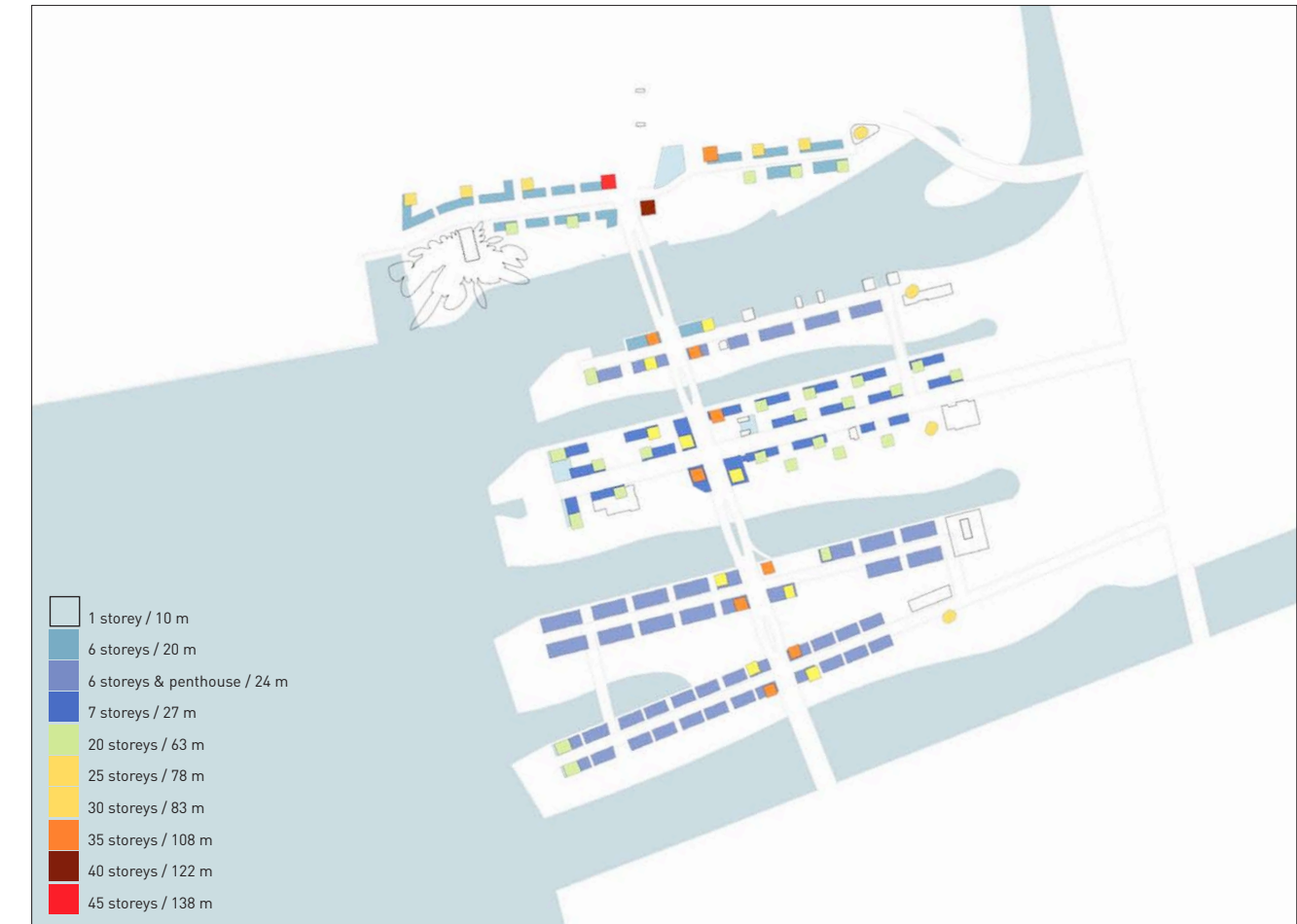
Aerial view of Don Mouth Park City down Cherry street

## CIRCULATION

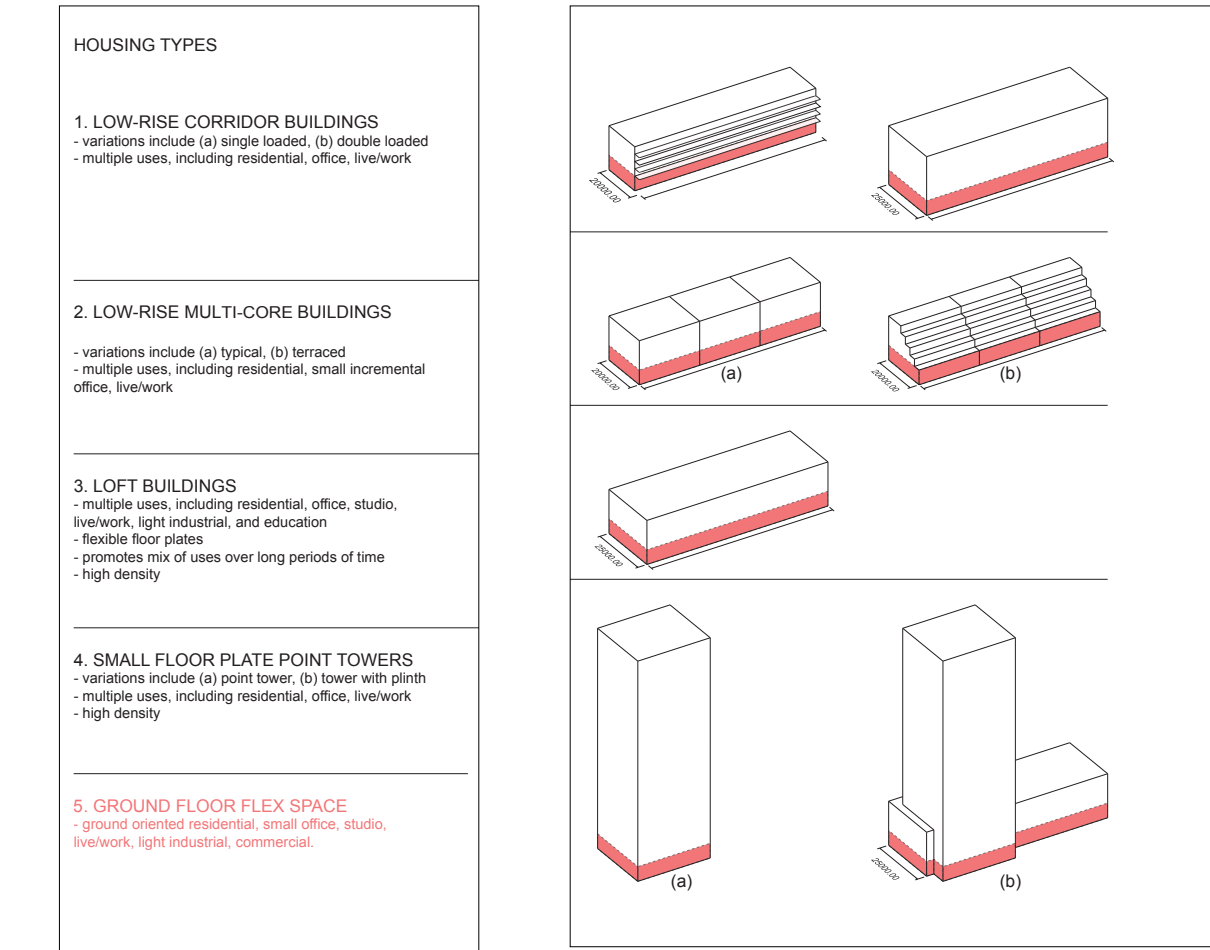


The entire road system of the Don Mouth Park will be raised above the regulatory flood line. It is set to accommodate the required automotive capacity for a new city of 50 000 inhabitants. But it will favour off street parking. The Don Mouth Park City seeks also to combine new transit convenience with an ever changing landscape of interest to promote movement by walking, public transit, bicycles, and boats as an attractive alternative to normal car use.

## BUILT PROGRAM



## TYPOLGY



The proposed development pattern balances expansion and re-naturalization of the Don Mouth estuary with a unique arrangement of compact development on linear banks. New development on the banks which is concentrated in compact east west bands to allow for the lushly landscaped water slips to happen between them. Buildings on each Bank are arranged on either side of a central street which is typically defined in section by seven storey base buildings with slender point towers set back above the base and staggered to maximize access to views and good day lighting throughout the development. The height and array of taller buildings varies from Quay to Quay in response to its particular location and role in the plan; Commissioners street extension, which is central and the widest, has more building bulk whereas the southern most Quay, which is narrowest and overlooked by the rest of the development has lower terrace buildings lining the Shipping Channel. The tallest buildings are staggered kitty-corner across the intersections, where the east west streets of the Quays cross Cherry, and are designed to give a unique character to Cherry that is visible on the skyline when viewed from the Inner Harbour. The height and array of taller buildings varies from Quay to Quay in response to its particular location and role in the plan; Commissioners street extension, which is central and the widest, has more building bulk whereas the southern most Quay, which is narrowest and overlooked by the rest of the development has lower terrace buildings lining the Shipping Channel.

## SUSTAINABLE CITY

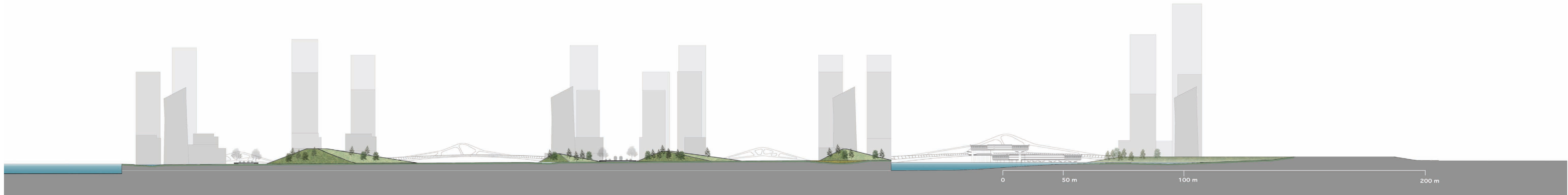


The entire Don Mouth Park neighbourhood will comply to the Sustainable Design Guidelines. It will integrate an entire range of concerns from water efficient plumbing to off-line sewage treatment, phytoremediation, energy efficiency, and waste management. Native trees will provide much needed shade in the summer and will contribute to CO2 fixing. The entire neighbourhood will be socially mixed offering a variety of possibilities in matters of alternative transportation and living. Last but not least, this entire sustainable project will serve as an exemplary educational base for generations of Torontonians to come.

# DON MOUTH PARK



# THE DON GREENWAY & ECO SLIPS



Don Greenway with Green Claws, north south section from the CN Railyard to the Ship Channel

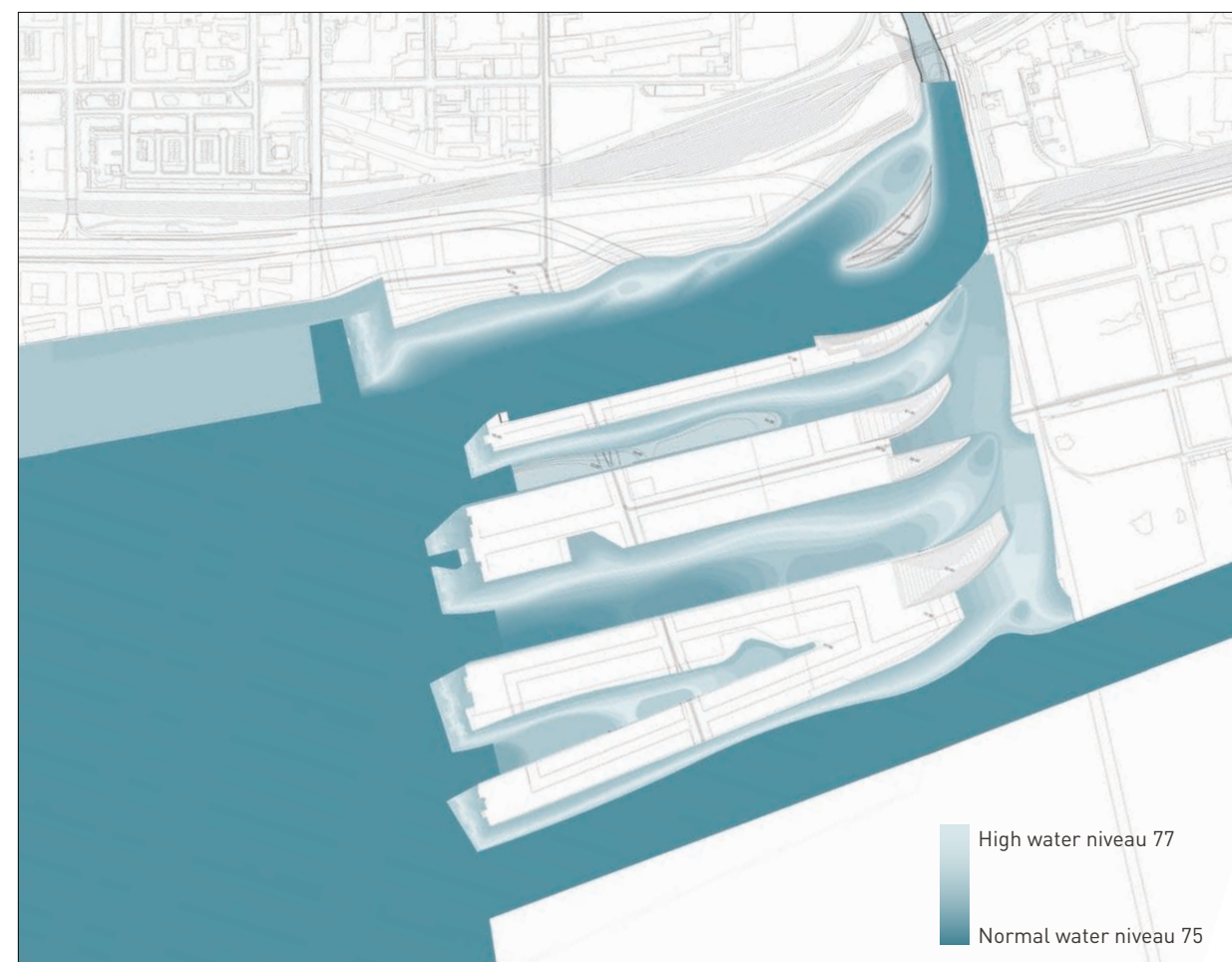


Commissioners Bank ecological slip in summer



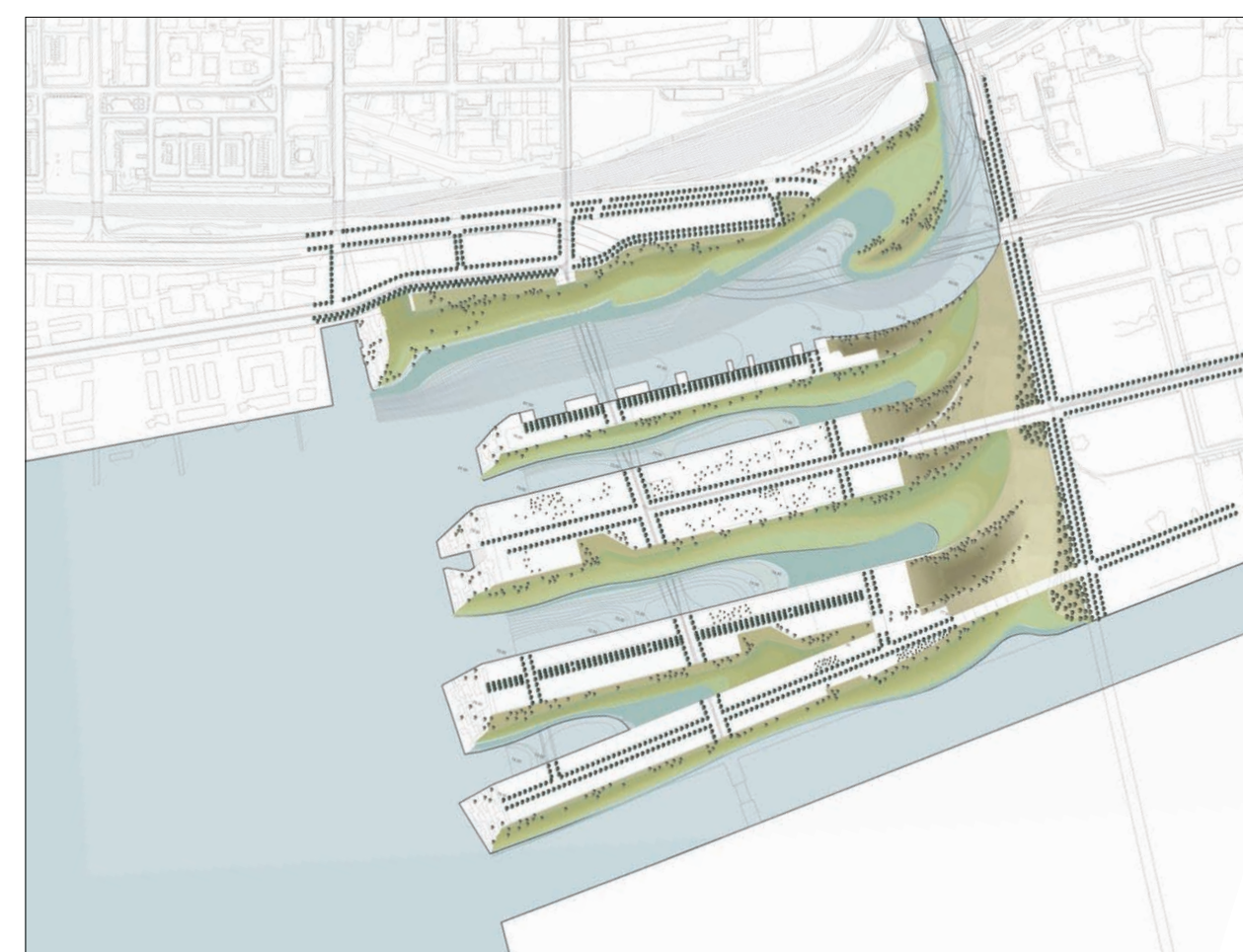
Don Greenway sport fields in winter

## DON RIVER FLOOD LEVEL



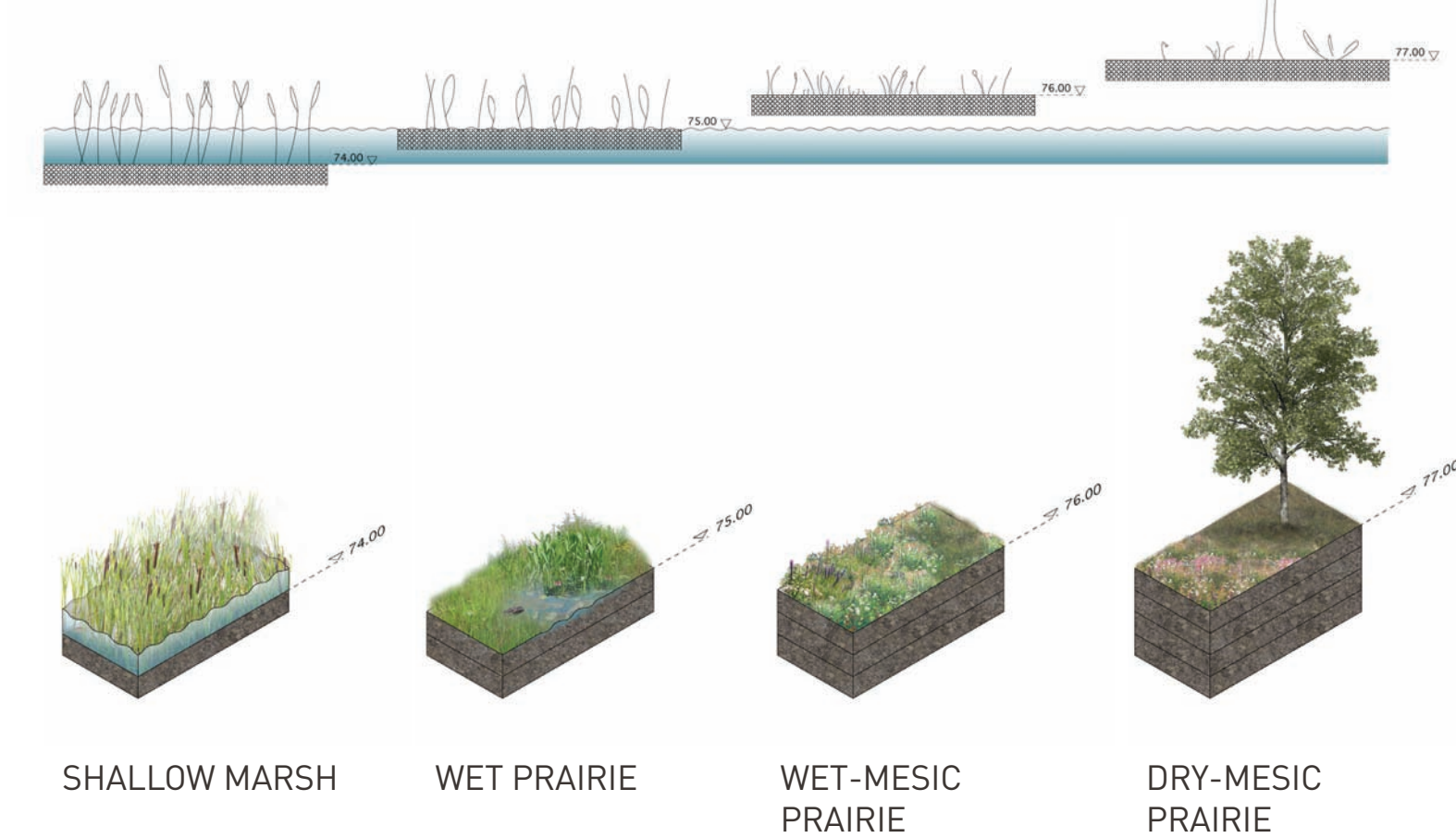
The difference between normal water levels and flood water levels shows how the Don Mouth Park enables the fanning-out of water events into the ecological slips. This particular adaptation of site conditions gives the opportunity of developing an extensive water based city in compliance with regulatory flood standards. The multiplication of these ecological slips contributes also to an extensive natural environment for wildlife regeneration and phyto-remediation.

## ECOLOGY & VEGETATION

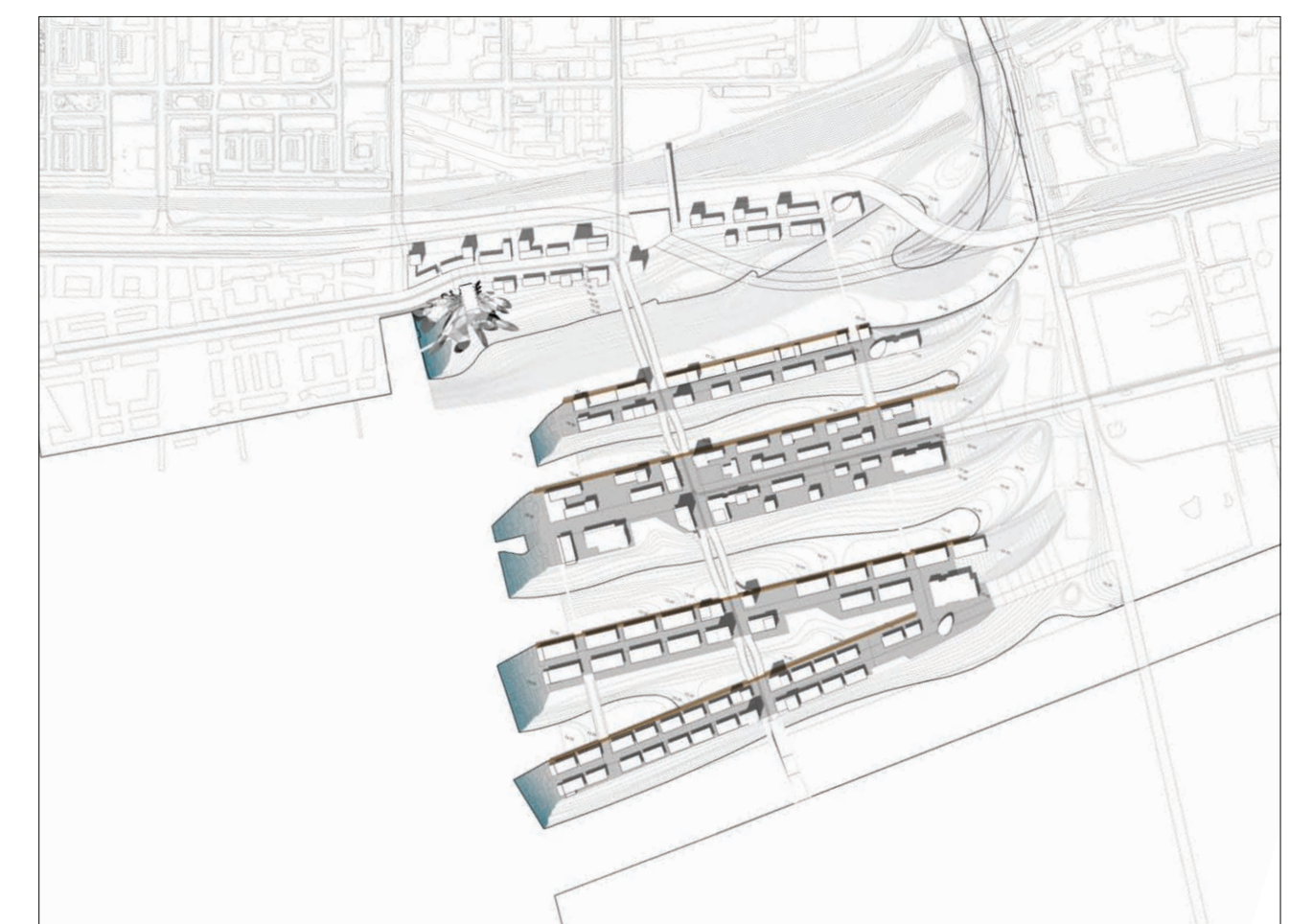


The entire ecological principle is based on maximizing the surface area of different vegetation strata ranging from emergent water species, through wet prairies, all the way to mesic grasslands and "savanna". In order to achieve this goal in a sustainable manner a very precise topographical gradient will be established. Erosion control of this new ecological topography will be achieved through the extensive use of rocks and rip rap on the emerged slopes facing current, this will also serve as spawning habitat for fish. The green claws in the Don Mouth and along the Greenway will all have a reinforced "tip" facing the river current. Vegetation will undergo several stages of ecological development starting with species specialized in soil remediation, and moving-on to subsequently through different several stages to attain climax communities. The vegetation will be a permanent indicator of the environmental health and working sustainability of the neighbourhood.

## VEGETATION TYPOLOGY



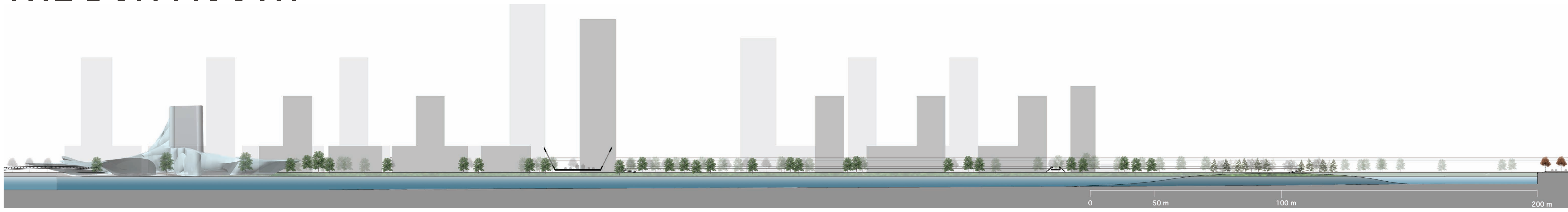
## URBAN LANDSCAPE & OPEN SPACE



The urban landscape of the Don Mouth Park will provide amenity value to its inhabitants. Through the extensive design of boardwalks, footbridges, trails, sidewalks and generous bike lanes shaded with native trees the entire landscape will confer a sense of sustainable quality. The sequence of public spaces extending from the Don Greenway Claws all the way to the Don Mouth Steps will convey a spirit of sustainable civic amenity. A variety of cultural programs and events will be staged on the steps facing the Inner Harbour and the Toronto skyline. The emphasis that is been made on public transport for the area means that a lot of these space within the range of the Tramway stops and the new GO station will become vibrant with public and commercial activity.



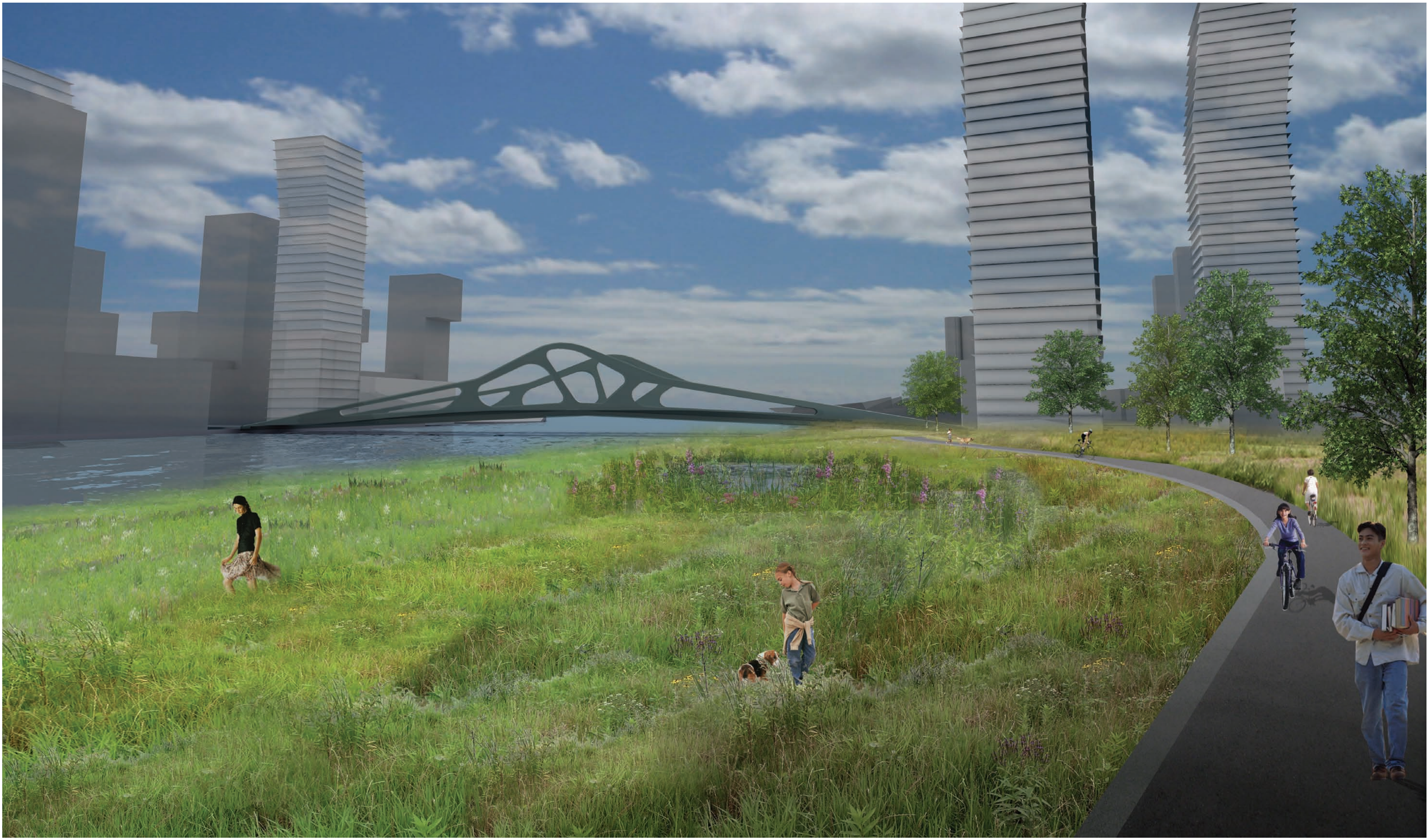
# THE DON MOUTH



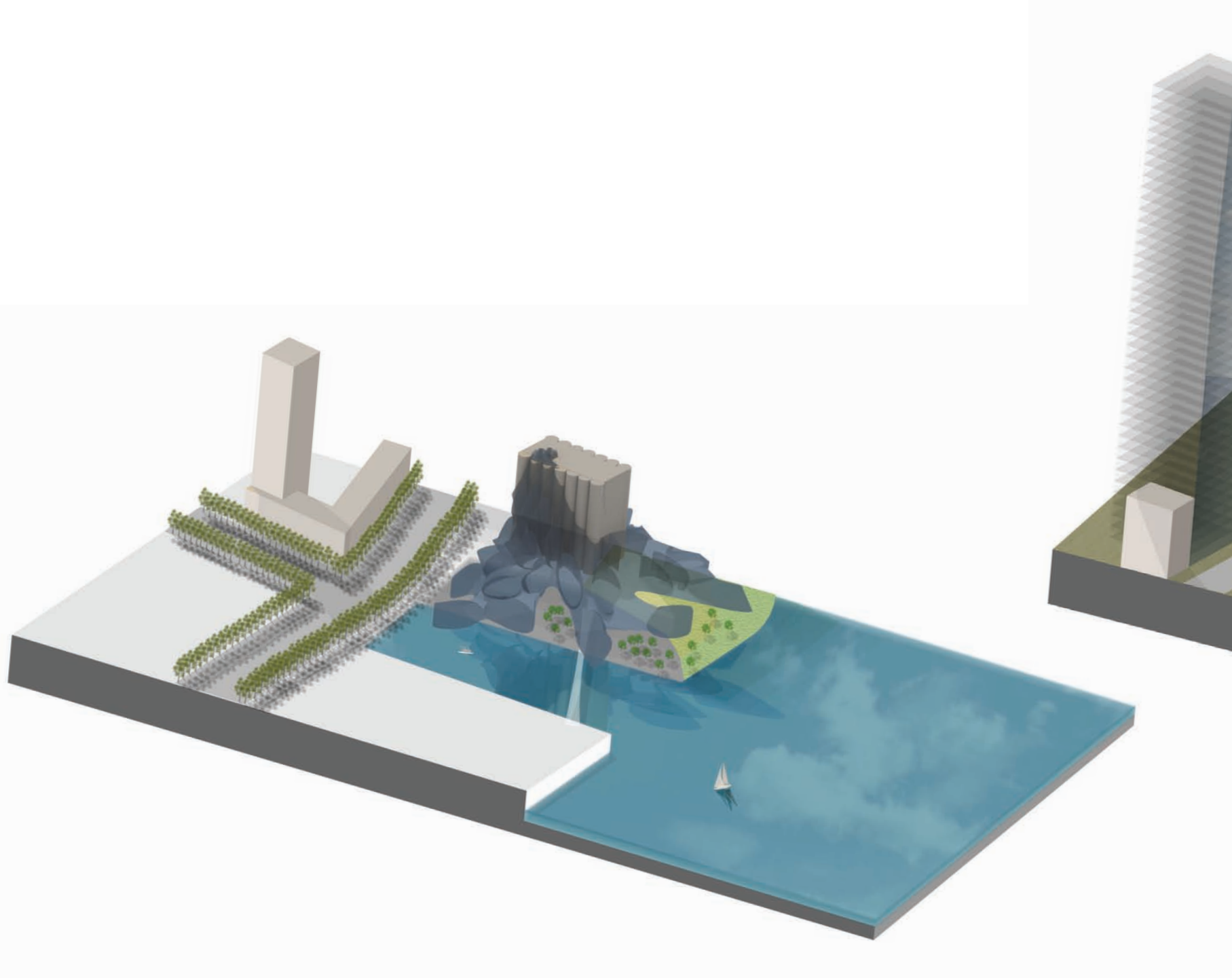
Don Mouth, east-west section from Parliament slip to the Don Roadway



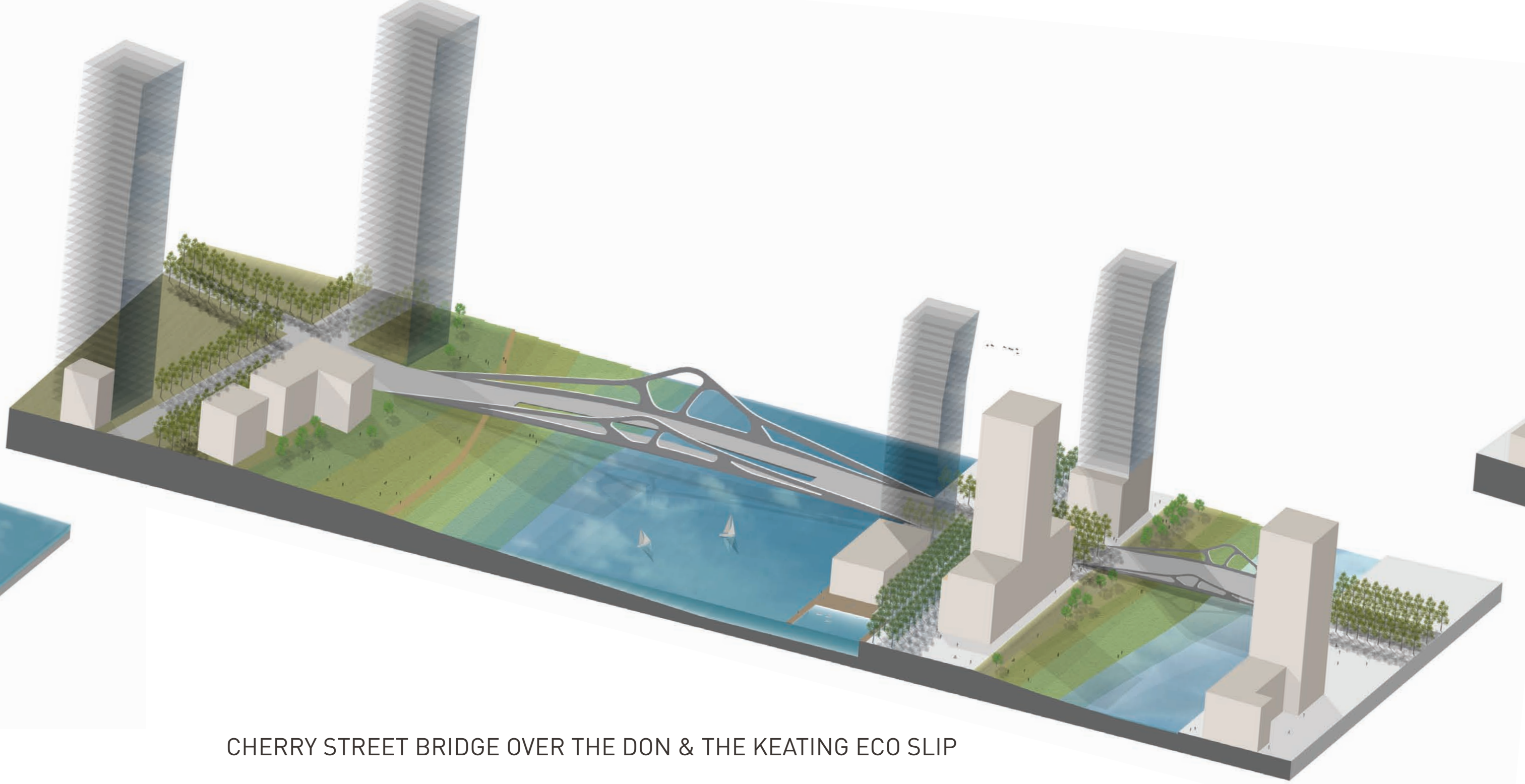
Don Mouth Boardwalk at Villers street



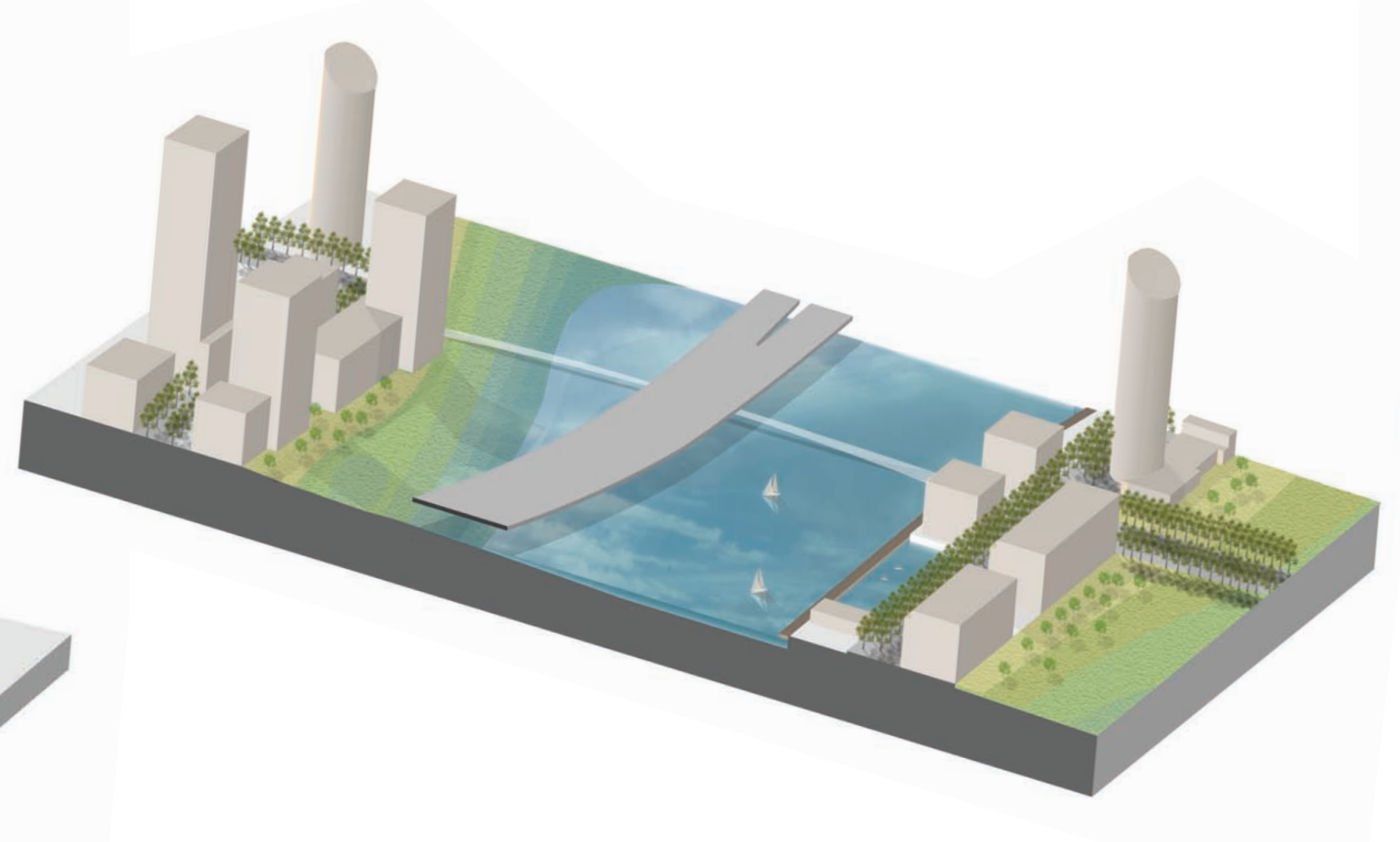
The Martin Goodman Trail in the wetlands east of Cherry street



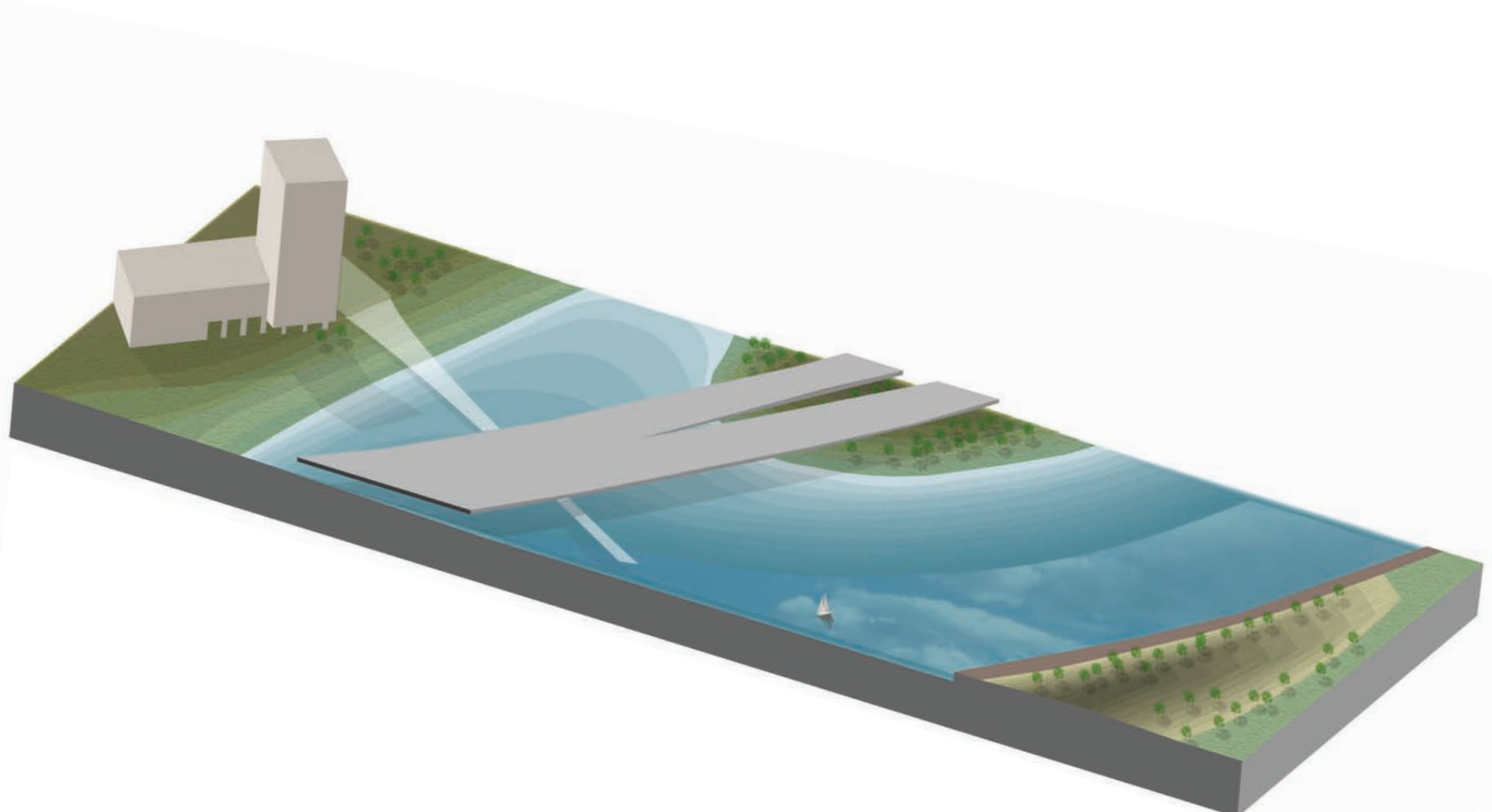
THE DON MOUTH AQUARIUM AT PARLIAMENT SLIP



CHERRY STREET BRIDGE OVER THE DON & THE KEATING ECO SLIP



VILLERS STREET FOOTBRIDGE OVER THE DON



GREEN CLAW AT THE DON RIVER BEND