BARK Apark for poole, wildlife, and water.

DISCUSSION GUIDE

PHASE 1 DESIGN HADDEN MILL & OXBOW ZONES

JUNE & JULY 2023

Surrey Parks

LAND ACKNOWLEDGMENT

We acknowledge that Surrey and the Nicomekl Riverfront Park are on the traditional unceded territories of the Coast Salish Peoples, including the **q**i**c**ə**y** (Katzie), **q**wa:**nX**ə**n** (Kwantlen), and **səmyámə** (Semiahmoo) land-based Nations. The parkland is on the traditional territory of the Snokomish peoples, a Nation decimated by smallpox. We are guests on this land.

The Nicomekl River and surrounding land is sacred to the Coast Salish Peoples who have lived on and connected with the land for more than 10,000 years. The river is central to the Coast Salish way of life and a part of ceremonies, cultural practices, and oral histories. Understanding both the environmental and cultural significance of the water and surrounding habitats is vital to creating a space that reflects and honours the Nations' rich history, culture and values.

We gratefully acknowledge the Katzie, Kwantlen and Semiahmoo First Nations, for their ongoing contributions towards the creation of an ecologically and culturally significant park that connects people, habitat and history.

– The Nicomekl Riverfront Park Project Team







LANGUAGES you will see in the guide: **SENĆOTEN** (spoken by Semiahmoo) **həň ở əmiň əm** (spoken by Kwantlen & Katzie)

What is Nicomekl Riverfront Park?

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What is Nicomekl Riverfront Park?

INTRODUCTION

Phasing Plan

We are developing a new 3 km park along the Nicomekl River in South Surrey. It will provide residents with increased recreational opportunities, protect the environment, support wildlife habitat and help Surrey adapt to climate change and sea level rise.

Weaving together ecology, culture, recreation and reconciliation, the park will stretch 3 km between Elgin Road (to the west) and 40 Avenue (to the east). When finished, it will be fourteen times larger than Crescent Beach Park in Surrey and it will help connect Surrey's green infrastructure system, trail system, and blueways (the rivers, lakes and oceanfront parks in Surrey).

This project is being developed in three phases and will take multiple years to complete. Designing and constructing an 80 acre park along one of Surrey's major river systems is complex and requires an innovative and collaborative approach. Comprised of sensitive ecosystems, the area is historically and culturally significant. In response to climate change, the park needs to be designed to accommodate sea level rise and flooding (*see* <u>Surrey's Coastal Flood</u> Adaptation Strategy). We are currently designing Phase 1, the largest area (24-acres) of the project, known as the Hadden Mill and Oxbow zones which are located on either side of King George Boulevard.

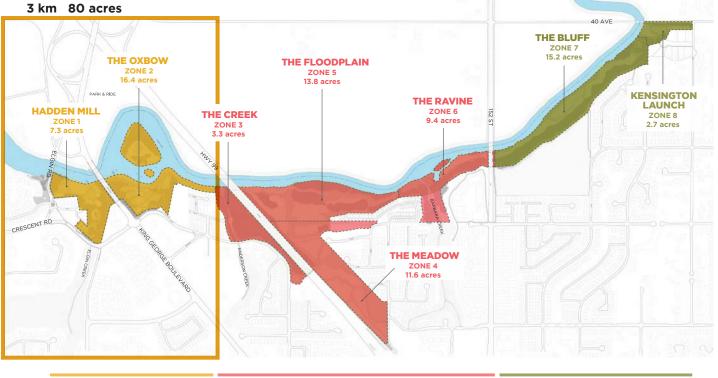
Once the design of Phase 1 is complete, Phase 2 design will begin. Phase 2 includes the creek, floodplain, meadow and ravine zones, which stretch from Highway 99 to 152 Street. Design characteristics from phase 1 will be applied to phase 2 and 3 to create a continuous riverfront experience.

We are committed to engaging with the community. From 2018 to 2020, Surrey Parks launched a multi-disciplinary research and park planning process that included extensive public engagement and site analysis. Working closely with affected and interested parties, including local First Nations, residents, and stakeholders, we developed the <u>Nicomekl Riverfront Park Management Plan</u>. Adopted by Surrey City Council in 2020, the plan outlines the park vision, objectives and master concept developed through public consultation.

We are excited to invite the community to provide feedback on the draft detailed plans and drawings of Phase 1 (Hadden Mill and Oxbow zones). We anticipate Phase 1 construction to begin in early 2024 with opening scheduled for 2025.

This discussion guide is about Phase 1, the Hadden Mill and Oxbow zones. The guide provides a background on what has been completed to date, what's happening next, the site's history and significance, the principles and rationale being used to plan and design the various park characteristics and elements, a sneak peak at the draft plans and drawings, and how to share your feedback.

This project is funded in part by the Government of Canada through the Disaster Mitigation and Adaptation Fund.



PHASE 1 the west Design 2021–2024 Construction 2024–2025 PHASE 2 the centre Design 2024–2025 Construction 2025–2026 PHASE 3 the east Design TBD Construction TBD



TELL US WHAT YOU THINK

PHASE 1 DESIGN HADDEN MILL & OXBOW ZONES



TAKE THE SURVEY

Scan the QR code to take the survey and learn more.

Survey closes July 14, 2023.





TUESDAY, 5:00-JUNE 20 7:00PM ELGIN HALL 14250 CRESCENT RD



<u>nicomeklpark@surrey.ca</u>



surrey.ca/nicomeklpark

Your input matters.

When finished, the park will protect the environment and help Surrey adapt to climate change.



This is a big park with a big impact and will take time to do it right.



PROJECT TIMELINE

PHASE 1		
continuous	Discussions & relationship building with First Nations	
Planning 2018 - 2020	Engagement & Park Management Plan	
Design & Construction		
Fall 2022	Archaeological field testing #1	
•	Developing a site strategy	
Fall 2022 / Winter and Spring 2023	 Technical design team workshops Environment, Flooding, Green Infrastructure Park programming Design charette Indigenous elements Naming, wayfinding, placemaking and signage 	
•	Design development	
Summer	Archaeological field testing #2	
2023	Completion of concept plans and renderings	
	 Public feedback on concept plans and renderings Open house, June 20 Stakeholder workshops Canoe and walking tour with Urban Indigenous Peoples 	
	Final concept plan	
Fall 2023	Design development	
1 411 2023	Evaluate topography and water system design with Ocean, Coastal, River Engineering Centre of National Research Council Canada	
•	Construction drawings	
	Municipal, provincial, and federal permits	
Summer 2024	Construction begins	
Winter 2025	Park Opens	
PHASE 2	Design 2024-2025 Construction 2025 - 2026	
PHASE 3	Design TBD Construction TBD	
+	,	

WHAT'S BEEN DONE

- + A ground survey of the entire 24-acre Phase 1 site to understand what is there and where
- + Inventoried and identified plant and animal species in the Hadden Mill and Oxbow Zones
 - » There are 654 live trees, 48% deciduous, 52% coniferous
 - » There are 23 invasive/non-native plant species
 - » There are 29 species of fish that have been documented in the Nicomekl River
- + Inventoried the creeks, ponds, river, sea dam, ditches, and water system to see how water is flowing, infiltrating, and draining through the site
- + Analyzed the site to understand how wildlife, plants, and water are moving through and using the site
- + Completed technical reports with inventories and analyses of plants, animals, trees, water, invasive species and neighbourhood context.
 - » Reports are used to understand the appropriate conditions needed to protect and enhance these species and features.
- + Developed base plan drawings which show existing features such as trees, hills, creeks, posts, etc.
- + Hired an Indigenous cultural advisor
- + Held a decolonization workshop for the project team
- + Developed a plan for engaging the community, stakeholders, First Nations and City staff
- + Conducted technical design workshops, developing three site approach options and evolving one approach into a concept design.
 - » Each option took a different approach to complex and conflicting challenges.



WHAT WE'RE WORKING ON

- + Meeting and building relationships with Semiahmoo and Kwantlen First Nations to learn about the history of the land and communities that utilized the river
 - » Discussing ways to integrate their culture and values through elements in the park
 - » Reviewing historical studies, oral histories, archaeological workplans, conducting field tests, meeting with knowledge keepers, and doing site tours.
 - » Hiring Indigenous artists from the host Nations to develop Indigenous cultural elements woven throughout the park.
- Incorporating feedback, advancing the conceptual design and developing plan, section, and perspective drawings.
- + Researching and applying for municipal, provincial, and federal permits
 - » The Nicomekl River is protected by law to preserve and enhance water quantity and quality as well as animal and plant communities
- + Collaborating on the design of nearby infrastructure projects (King George Boulevard Bridge, Sea Dam, etc.)
 - » A pathway under King George Bridge will connect the two park zones to each other and to sidewalks and bike lanes
- + Working with Ocean, Coastal, River Engineering Centre of National Research Council Canada to research water movement
 - » Developing a 2D hydrodynamic model to understand how water moves in the river. This model will help understand how to ensure success in re-naturalizing and enhancing the parkland.

WHAT WILL HAPPEN NEXT

The City of Surrey is committed to consulting with a diverse range of residents, user groups, stewards, stakeholders and First Nations to shape the Nicomekl Riverfront Park.

In June and July, Surrey Parks will host engagement events to collect feedback on the Phase 1 design concept plan and drawings. The concept plan and drawings will show amenity locations and illustrate the experience of the future park.

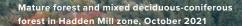
- + Public open house, Tuesday June 20
- + Online survey, June 14 July 14
- + Stakeholder meetings, June and July
- + Canoe and walking tour with Urban Indigenous Peoples, July.

With public feedback received, we will revise and finalize the concept plan, create construction drawings, get permits, and begin construction.

Between 2018 and 2022, during the creation of the Park Management Plan, two rounds of engagement occurred. Public engagement results can be found in the <u>Public Consultation Summary Report</u>.



KELK IŁĆ (SENĆOŦEN) NOOTKA ROSE (ENGLISH)



θəθiqət (həả d əmiả əm) forest (English)



WHAT'S THERE NOW

Existing Conditions

The Nicomekl River flow is a highly controlled waterway engineered for flood control, which has significantly altered the natural systems and reduced fish and wildlife habitat. The area around the park historically experienced flooding from significant rainfall events, high tides and storm surges and it is expected that climate change will increase the frequency and impact of these events.

The Nicomekl River is one of three major river systems in Surrey and is important habitat for many fish and wildlife species. Located along the Pacific flyway migration route, the park and surrounding region is a vital stopover point for millions of migrating birds each year.

The project area contains a variety of landscape types, including forests, grasslands, floodplains, wetlands and open water. Several areas throughout the site are also dominated by invasive/non-native species. Several streams cross the site and flow into the Nicomekl including Elgin Creek in the Hadden Mill zone.

Site History

The Nicomekl River is a historically important body of water. The word nəġ əməġ əl (or the anglicized "Nicomekl") comes from the həň ở əmiň əm language meaning "always flooding." Celebrated in oral histories, ceremonies and cultural practices, First Nations identity, nationhood, and cultural survival are interconnected to their relationship with the land.

When colonial settlement occurred in the area, European settlers used the river to explore the region and later created a logging and sawmilling operation on the south bank of the Nicomekl River at Elgin Road. The Hadden Mill site, purchased in 1908, was reliant on the river to transport goods. The river continued to be used for transportation by settlers until the early 1900s when the construction of dams and filling of the floodplain led to its closure as a transportation route. A Coho salmon (Oncorhynchus kisutch) hatchery was formerly operated in the Hadden Mill zone on private property. Salmon fry were reared in ponds and released into Elgin Creek.

The Oxbow zone was home to the Riverside Golf Centre prior to 2016. During its operation, ongoing pumping kept the site dry. Since its closure, a seasonal wetland has naturally formed in the area.

Park Design

WHAT'S PLANNED FOR THE PARK

Park Vision

The Nicomekl Riverfront Park will connect, restore, and enhance the animal and plant communities along the Nicomekl River into a unified and beautiful park experience to be enjoyed by people of all ages throughout all seasons. The park will offer kayaking, canoeing access, gathering spaces, playground, trails, and more!

Cultural elements will be woven throughout the park to express Coast Salish culture, values and elements. Opportunities are being explored to reconnect Coast Salish peoples with this land.

Design Principles

- + Centering Semiahmoo, Kwantlen, and Katzie values, ways of doing and knowing
- + Reconnecting with land and water
- + Celebrating the river
- + Learning and cultural exchange
- + Sustaining all forms of life
- + Adapting to a changing climate

Design Approach

Balancing Environment, Recreation and Culture

We've adopted a nature-based design approach to protect plants, trees, and the park's natural water system, now and in the future. Combining environmental, cultural, social, and recreational spaces, the park design will include trails, kayak/canoe launches, viewpoints, and a playground, among other features that promote nature, recreation and play. Design will pay special attention to restoration and environmental considerations. Recreation and culture activities will be oriented around the river.



FIRST NATION





Decolonization & Reconciliation

Discussing and building relationships with host Nations, and providing residents with opportunities for reconciliation, are primary objectives for the Nicomekl Riverfront Park. Discussions with Semiahmoo First Nation, Kwantlen First Nation and Katzie First Nation have been ongoing since 2018 and will continue throughout the project. Information sharing, relationship building, and technical dialogue about archaeology, art and culture, environment, ecology, and the individual Nations' histories are fundamental.

Parks is working closely with Semiahmoo First Nation to develop a new archaeology process to protect the Nation and Coast Salish culture and heritage.

As a new process, an Indigenous neutral cultural advisor joined the project team. The cultural advisor is working alongside the City and design team to provide cultural guidance to support decolonization of the park design and the design process itself. They are facilitating discussions with host Nations to ensure the appropriate and respectful integration of Semiahmoo, Kwantlen, Katzie and Coast Salish culture, values, and elements.

With other team members, the cultural advisor is working with the three artists from Semiahmoo and Kwantlen First Nations on cultural elements to be woven throughout the park.

The project team is committed to continually learning and is thankful for all the time and knowledge the First Nations have shared. We will continue to work with First Nations to understand and identify historical sites in the area.



JSÁY (SENĆOŦEN) **DOUGLAS FIR (ENGLISH)**





PARK CONCEPT DESIGN

We have designed the park to a conceptual level. The design is based on your feedback in the park planning stage and discussions with First Nations, other levels of government, stakeholders, and nearby projects.

Explore the design and take the online survey or attend the open house to tell us what you think of the design.

Draft Concept Plan

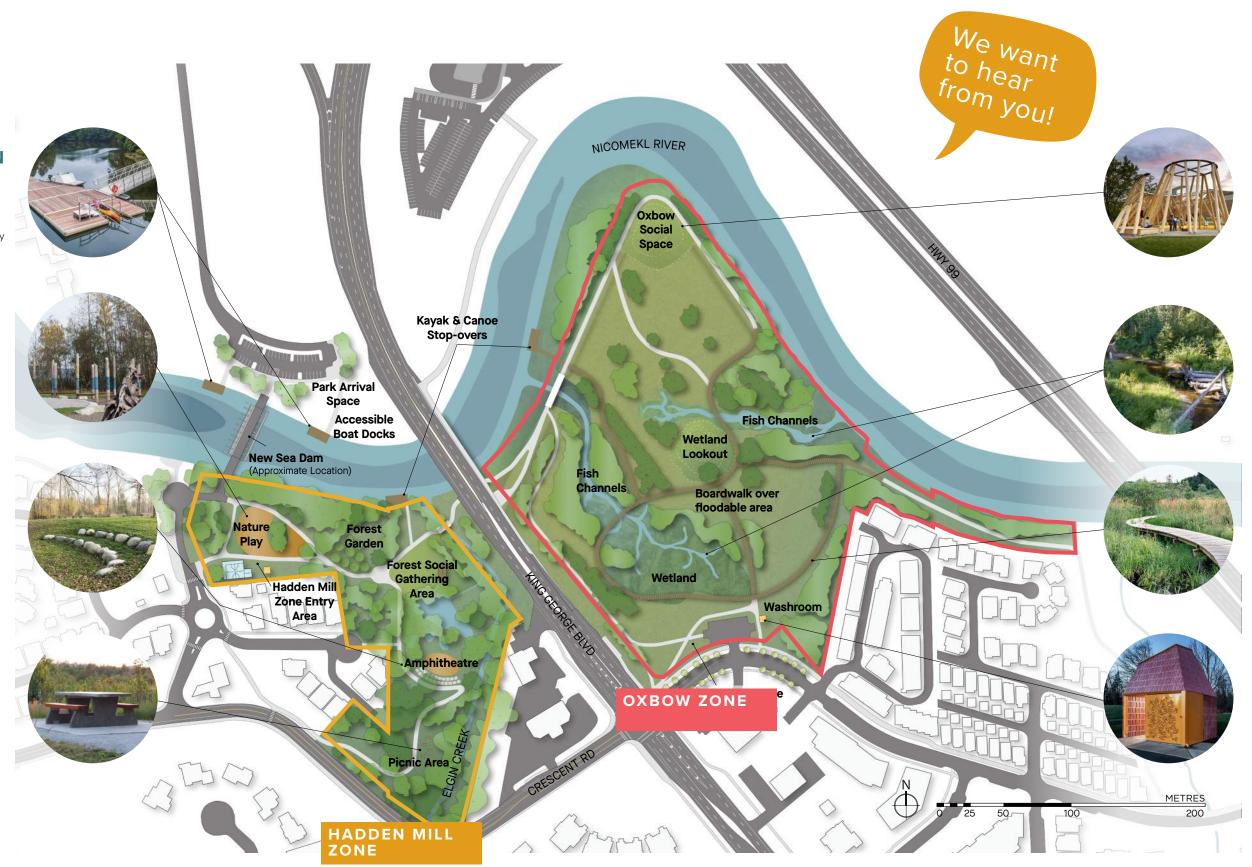
This is the draft concept plan for the Hadden Mill and Oxbow zones. The following pages include diagrams to further explain the concept and precedents.

LIGHT TOUCH APPROACH

To preserve and protect sensitive plants, trees, wildlife, and habitat, we designed the park with a light touch approach. This means we will enhance and maintain existing trees, plants, ponds and the wetland. We will limit disturbance by minimizing digging, and using low impact construction techniques like a raised boardwalk.

INTEGRATING CULTURE

Indigenous Coast Salish culture, history, stories, and art will be present in multiple locations and ways throughout the park. Artists from Semiahmoo and Kwantlen First Nations are developing cultural pieces and advising on the park design. This cultural work will create opportunities for reconnection with this land, and for all peoples to learn history and culture.



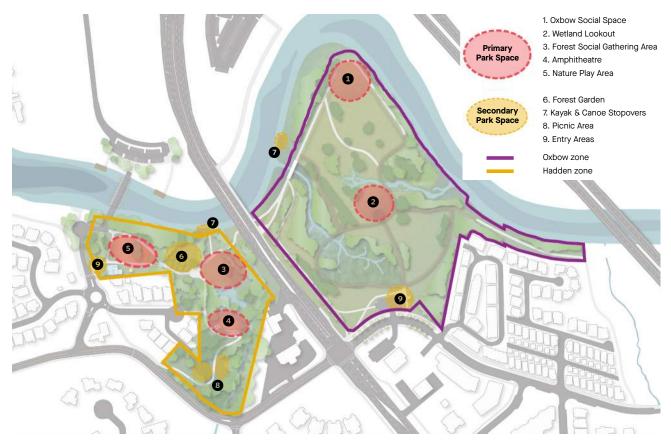
SŦXÁLEM (SENĆOŦEN) SWORDFERN (ENGLISH)



ELILE IŁĆ (SENĆOŦEN) SALMONBERRY (ENGLISH)

Park Spaces

The park will have several social and gathering spaces. Stop and have a rest, hang out with friends or family, or have a picnic. Primary park spaces are designed to accommodate groups of people, and secondary park spaces are designed for quick stops or small groups.





Oxbow Social Space (Image: Brook McIlroy)



Amphitheatre (Image: space2place)



Forest Garden (Image: Native Plants PNW)



Wetland Lookout (Image: Buffaboy, Wikipedia)



Nature Play Area (Image: space2place



Kayak & Canoe Stopovers (Image: Studio Basta)



Forest Social Gathering Area (Image: space2place)



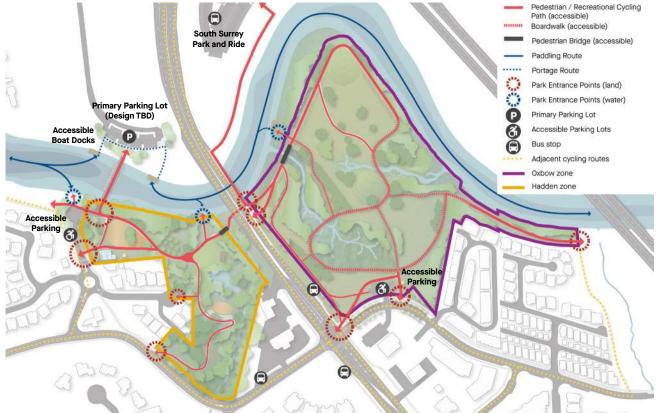
Nature Play Area (Image: space2place)



Picnic Area (Image: space2place)

Park Trails And Entrances

Both the Hadden Mill and Oxbow zones will have multiple land entrances and one or more river entrance. The main entrance at each zone will have a washroom, signage, and a small parking lot with accessible parking. Pending provincial approvals, the main parking lot will be north of the river and accessible via the Sea Dam. The main park trail will be along the river. The trails are about 2 km total length and will be a universally accessible grade.





Boardwalk over Wet Areas (Image: O2 Planning + Design)



Pedestrian Path (Image: City of Surrey)



We want to hear from you!

Pedestrian Bridge over Creek and Channel (Image: Algonquin Bridge)



Accessible Boat Dock (Image: The Dock Doctors)

Making Room for the River—Floodable Spaces

To adapt to sea level rise and restore the land's natural processes, we will 'accommodate' natural processes by allowing flooding in certain areas. We will cut two holes in the existing dyke and create two fish channels to reconnect the Oxbow parkland to the river. The channels are designed based on maximum water levels and extreme rains. Water will flow into the parkland and raise and lower throughout the year. Don't worry, you can still use the park while it is flooded via the raised boardwalk structure. Reconnecting the floodplain land to the river will create important habitat for fish, amphibians, and birds.







Raised boardwalk in flooded area (Image: Reed Hilderbrand)

Raised boardwalk in flooded area (Image: Agence Territoires)





Habitat Types

There are a variety of habitat types in the park. The park is designed to preserve, protect and enhance these habitats to improve ecology and biodiversity. Less is more— we will preserve the existing habitat and the park will continue to naturalize as it has been doing over the past few years. Like all Surrey parks, we will manage invasive species and the health of plants and trees.





Emergent/Shrubby Wetland (Image: Inter-Fluve)



Riparian Forest (Image: City of Surrey)



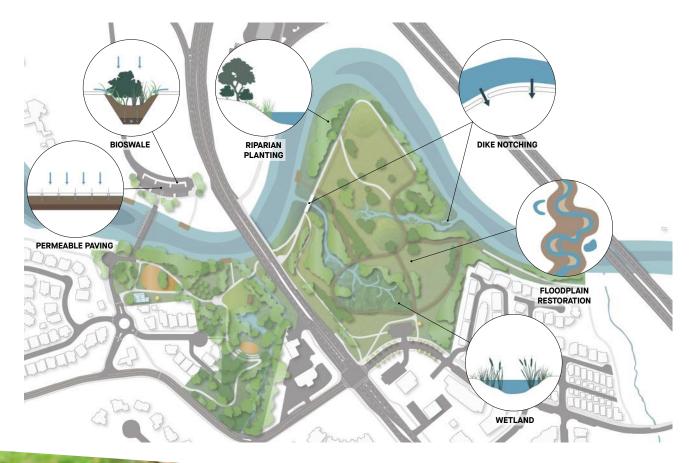
Meadow (Image: space2place)



Upland Forest (Image: AllTrails)

Nature-based Infrastructure Elements

We are designing with nature! The park will use nature-based infrastructure elements to accommodate flooding, assist with water drainage, improve water quality, and prevent erosion. These elements play an important role and will make the park more resilient to climate change and sea level rise. The elements also provide co-benefits like habitat for wildlife, recreation spaces, and aesthetic value.



məq^we:m (həỉ ở əmiỉ əm) wetlands (English)

Nature Kids Nicomekl doing pond dipping activity in Hadden Mill zone, May 2019.



WETLANDS

Wetlands can help control flooding by absorbing and storing large volumes of water, which is then slowly released as flood waters recede.



OFFLINE STORAGE

Offline storage areas attenuate flooding by storing floodwater that has been diverted from the river channel.



FLOODPLAIN RESTORATION

Floodplain restoration re-establishes the hydrological connection between rivers and their natural floodplains, allowing these areas to become inundated and store water during flood events.



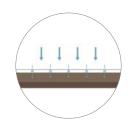
DIKE NOTCHING

Notching involves adding holes to dikes to allow water to access the floodplain during floods. By allowing the floodplain to accommodate more water, the destructive power of floods is reduced.









RIPARIAN PLANTING

Planting reduces the erosion of riverbanks by slowing the flow of water and providing root reinforcement to the banks. It also holds water in the floodplain to reduce downstream flooding.

VEGETATED RIPRAP

The placement of boulders with live stakes, pole planting or brush layering along a riverbank provides slope stabilization and erosion control.

BIOSWALE & RAIN GARDEN

Bioswales and rain gardens store, treat and infiltrate runoff, to reduce the amount of stormwater entering the sewer system.

PERMEABLE PAVING

Permeable paving intercepts and infiltrates stormwater by allowing it to drain through the surface of the paving and into the ground. This process helps to mitigate flooding by reducing runoff.

Your input matters.

When finished, the park will protect the environment and help

Surrey adapt to climate change.

TELL US WHAT YOU THINK

PHASE 1 DESIGN HADDEN MILL & OXBOW ZONES



Scan the QR code to take the survey and learn more.

Survey closes July 14, 2023.





<u>nicomeklpark@surrey.ca</u>

HOUSE

TUESDAY, 5:00-JUNE 20 7:00PM ELGIN HALL 14250 CRESCENT RD



CRESCENT





DISCUSSION GUIDE NICOMEKL RIVERFRONT PARK / PHASE 1 DESIGN HADDEN MILL & OXBOW ZONES JUNE & JULY 2023

