Enchanted Green Blue Infrastructure

by

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in partial fulfillment of the requirements of the degree of

MASTER OF LANDSCAPE ARCHITECTURE

Department of Landscape Architecture
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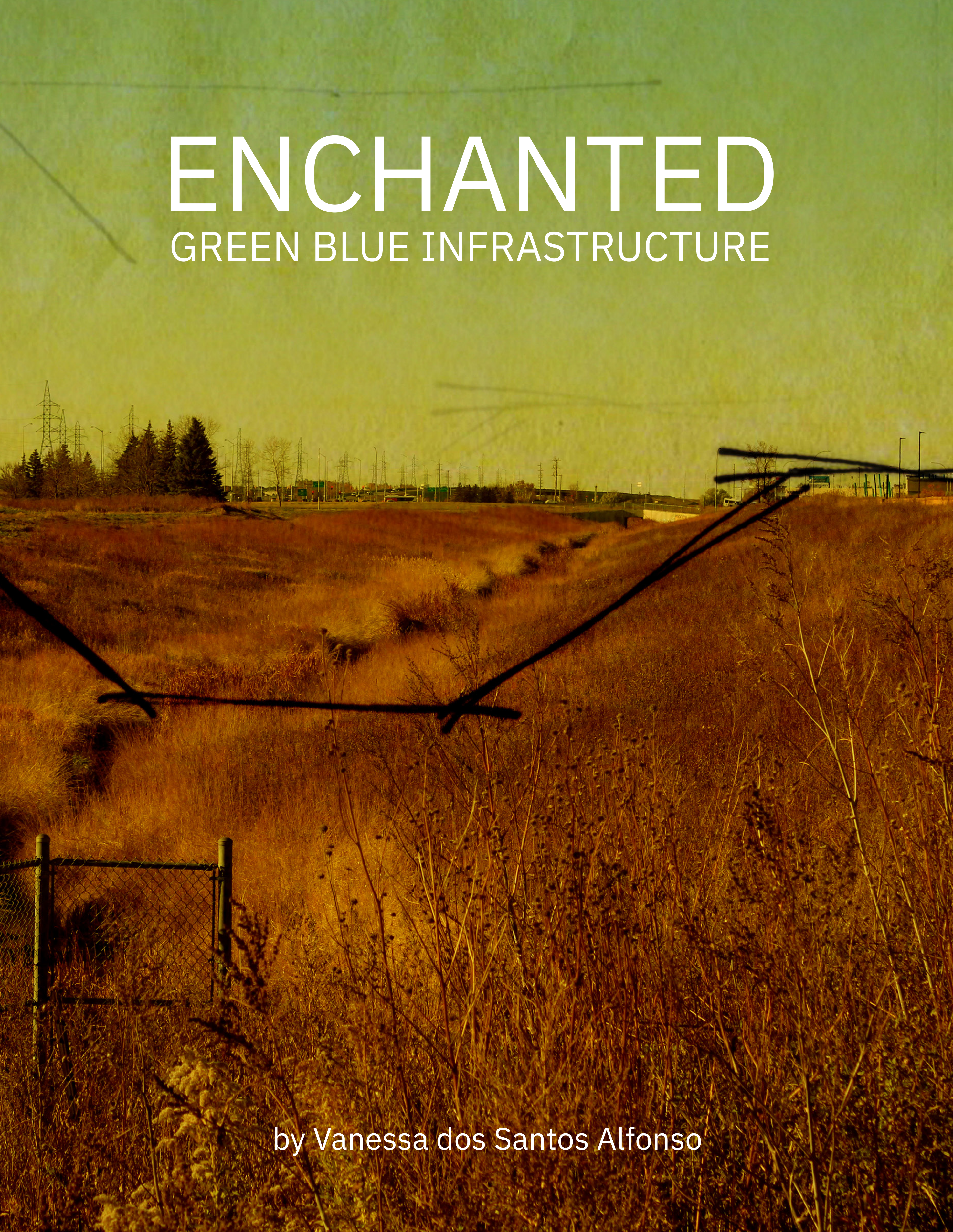
Winnipeg

ENCHANTED

GREEN BLUE INFRASTRUCTURE



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ACKNOWLEDGEMENT

This practicum is dedicated to my family, who supported me throughout the Master of Landscape Architecture. They were my motivation through and through.

Secondly, I would like to express my gratitude to Dietmar Straub. His support and enthusiastic spirit was essential. Our great partnership helped deliver a practicum that I am proud of.

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aspire

I aspire to live in a livable, walkable, and sustainable urban landscape that fosters environmental stewardship and a strong sense of community. Having experienced life in diverse settings, from Brazil's tropical landscapes to Winnipeg's urban environment, I deeply value neighborhoods that harmonize natural systems with humanity.

As a mother, I envision a neighborhood where I can safely walk or bike with my daughter, enjoy green spaces for play and relaxation, and benefit from thoughtfully designed public areas that encourage connection and interaction with neighbors.

This practicum fuels my passion for designing urban spaces that prioritize walkability, connectivity, and inclusivity while embracing ecological principles. Throughout this journey I seek to explore how landscape architecture can create vibrant, resilient neighborhoods where both people and nature can thrive.

ABSTRACT

Enchanted Green Blue Infrastructure reimagines the post industrial corridor south of the Refinery District in Winnipeg, Manitoba as a living social ecological landscape. The project responds to a site shaped by industrial remnants, fragmented access, and overlooked ecological potential. By integrating water, landform, vegetation, and community use into a cohesive framework, the design transforms the corridor into an extension of both the Refinery District and the Awasisak Mēskanow Greenway.

The practicum explores how green blue infrastructure can become more than a technical system by supporting biodiversity, enhancing stormwater performance, and creating a resilient foundation for future growth. At the same time, the design introduces community gardens, gathering spaces, play environments, and accessible pathways that foster cultural connection, learning, and a sense of belonging for surrounding residents.

By working with existing conditions and strengthening natural systems, the project demonstrates how urban landscapes can reconnect people with the land while addressing functional, ecological, and social needs. Enchanted Green Blue Infrastructure positions the corridor as a meaningful place to inhabit, experience, and care for, illustrating how infrastructure can cultivate both environmental resilience and enriched community life.

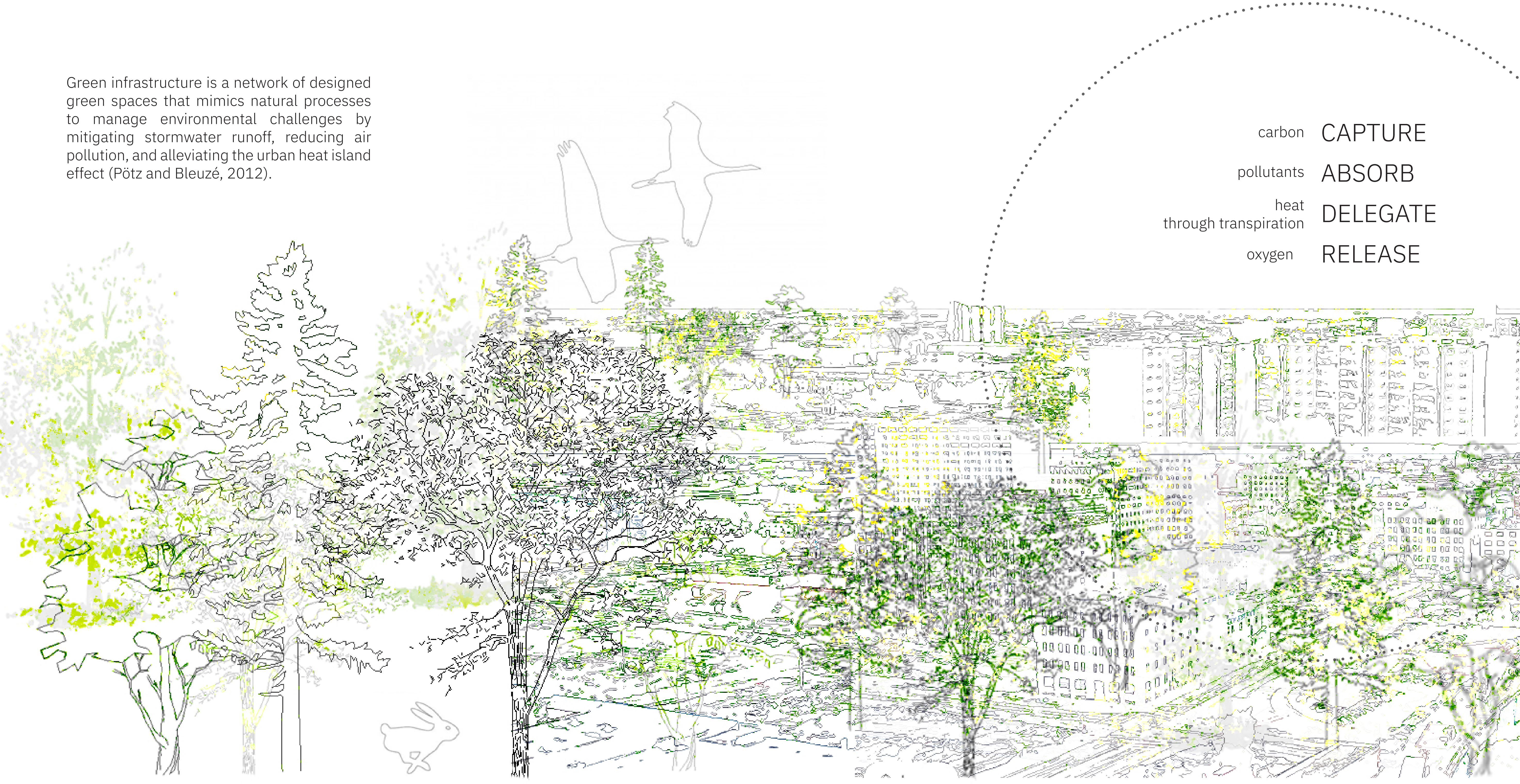
ENCHANTMENT

Enchantment in the landscape emerges when design transcends mere utility to evoke curiosity, memory, and sensory delight. Landscapes should not only solve practical problems but also provoke wonder and emotional engagement through spatial ambiguity, material richness, and temporal change.

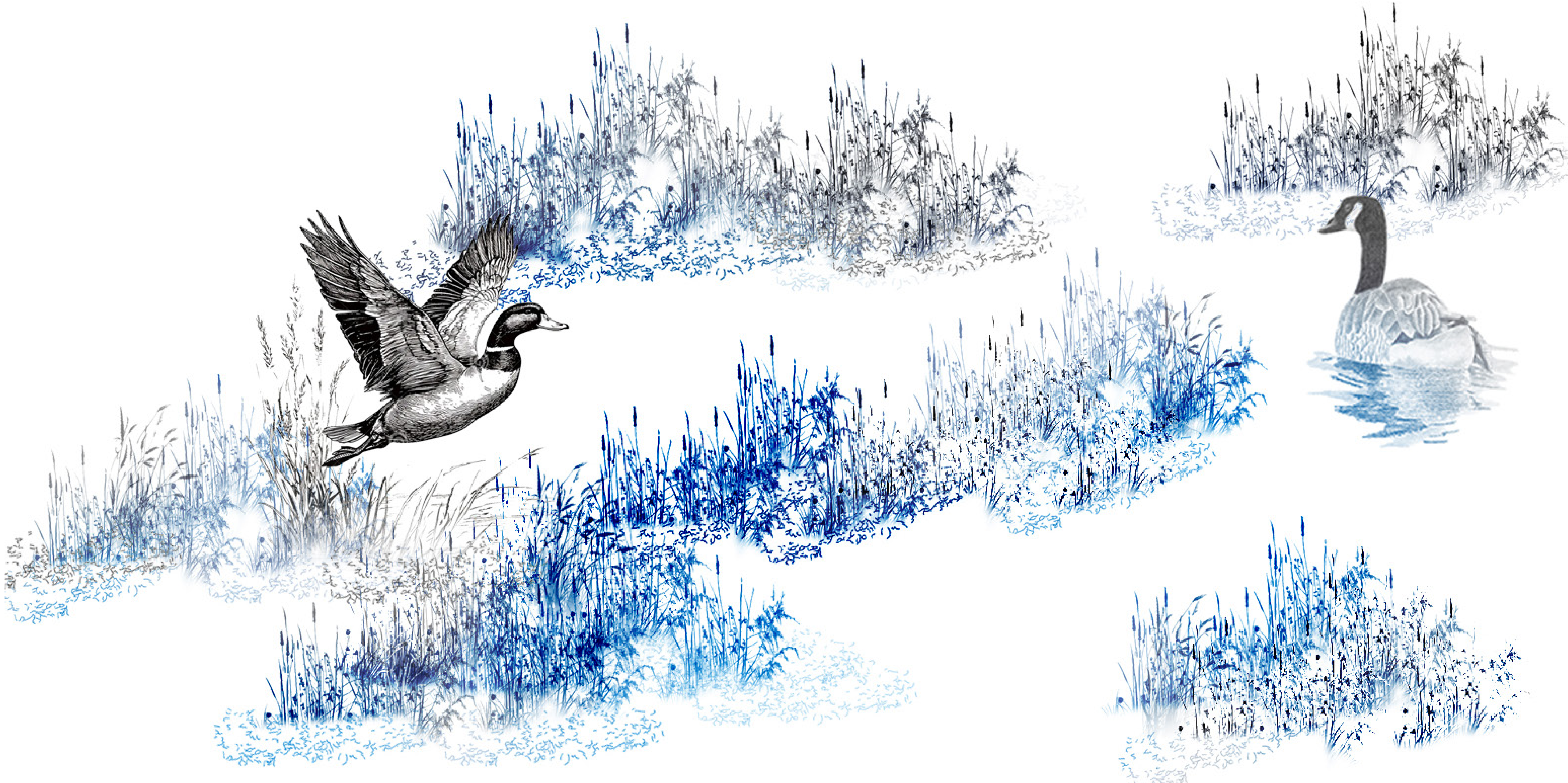
Delight can act as a stimuli for deeper human engagement with ecological systems when everyday encounters become immersive, sensory experiences (Herrington,2009).

GREEN INFRASTRUCTURE

Green infrastructure is a network of designed green spaces that mimics natural processes to manage environmental challenges by mitigating stormwater runoff, reducing air pollution, and alleviating the urban heat island effect (Pötz and Bleuzé, 2012).



In addition to managing environmental challenges, green infrastructure provides essential ecosystem services, including air purification, carbon sequestration, temperature regulation, food production, and pollination. By integrating vegetation and natural processes into the built environment, it enhances ecological functioning, supports climate mitigation and adaptation, and improves the quality of life for urban residents.



BLUE INFRASTRUCTURE

Blue infrastructure is an integral component of urban design, treating stormwater not as waste but as a valuable resource. Instead of relying solely on underground sewer systems, it incorporates natural processes into the built environment to collect, store, and treat runoff on site, while also managing excess flow. This approach enhances ecological function, improves water quality, and strengthens the livability and resilience of urban spaces (Wenk, 2021).

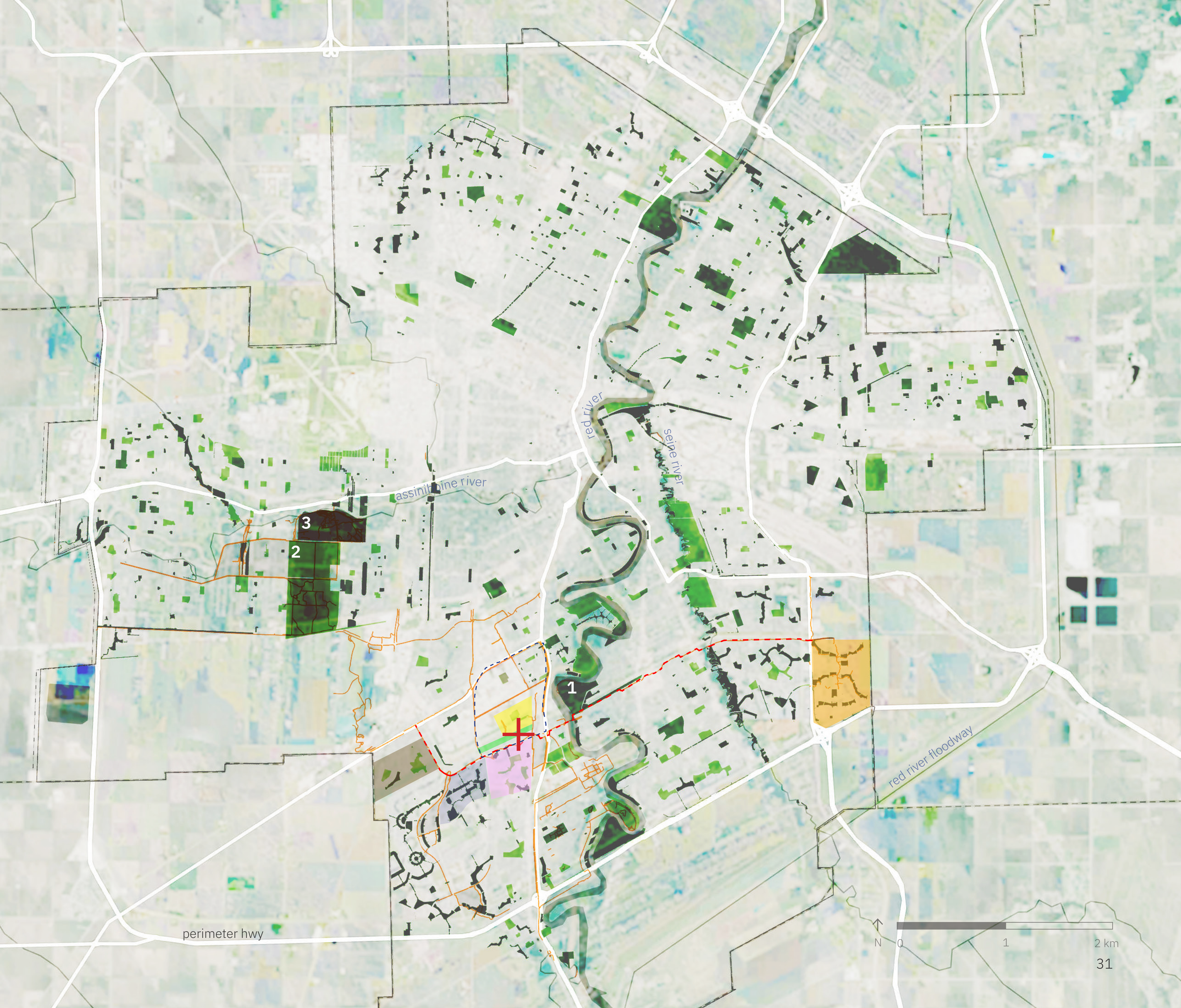
Integrating natural water systems into human-designed landscapes, Manitoba's prairie potholes offer a strong reference for how ecological diversity and natural processes can inform urban design. These small, shallow wetlands function as biodiversity hotspots and, even when they do not retain water year-round, they help control flooding, support groundwater recharge, and provide habitat for prairie wildlife (Government of Manitoba, n.d). Because the practicum site is located in southwest Winnipeg, within the broader prairie pothole region of southern Manitoba, these wetlands provide a relevant ecological model for understanding how water behaves in this part of the province. Although the site itself contains a constructed canal rather than natural potholes, the regional hydrological context highlights the importance of strategies that slow, hold, and filter water in landscapes that experience seasonal variability and rapid runoff.

Drawing inspiration from their form and function, urban blue infrastructure can be designed to mimic these natural processes, managing runoff on site while fostering ecological resilience and delivering social benefits.

UNDERSTANDING THE SITE

site location

+ site location
refinery district
sage creek
waverley heights
bridgewater forest
white ridge
city of winnipeg boundary
chevrier neighborhood
site signification bicycle trail
awasisak meskanow greenway
1 st. vital park
2 assiniboine forest
3 assiniboine park



The site is located in southwest Winnipeg, within the Chevrier neighborhood, and functions as a crucial link between urban development and surrounding natural systems. The site location acts acts as a transitional zone, connecting residential and commercial areas to the Awasisak Mēskanow Greenway and and other regionally important ecological corridors. By bridging the built environment with the natural landscape, the design intends to create a hybrid space where urban life and ecological systems intersect, promoting sustainability, resilience, and a sense of place for the surrounding community.

Enchanted Green Blue Infrastructure addresses the neglected land between the new Refinery District and Abinojii Mikanah in the Chevrier neighborhood, southwest of Winnipeg. The site is bounded by Abinojii Mikanah to the south, Chevrier Boulevard to the north, Waverley Street to the west, and the Rapid Transit corridor to the east.

Positioned at the intersection of residential, commercial, and transportation networks, with Abinojii Mikanah serving as a defining edge, the site has the potential to play a central role for the existing Awasisak Mēskanow Trail East (formerly the Bishop Grandin Greenway). Offering an opportunity to strengthen the currently fragmented connections between urban parks, community gardens, and surrounding neighborhoods, weaving a continuous urban network that prioritizes both ecological and social connectivity.

By drawing from the site's existing qualities and opportunities, the project reinforces local social and cultural patterns, fostering a shared landscape that enhances everyday life while supporting broader urban resilience.

site location

- site location
- open spaces | parks
- bicycle trails
- potential bicycle trail connections
- rapid transit
- multi-family housing
- industrial
- office
- commercial

Located south of the Refinery District and north of Abinojii Mikanah, this abandoned open space offers a unique opportunity for both ecological and social reclamation. The site, once overlooked and underused, can now be reimagined as a landscape that restores natural processes while creating spaces for people to gather, move, and connect.

Through thoughtful design, this area can transform from a neglected buffer zone into an active ecological corridor that bridges the surrounding neighborhoods and reestablishes a meaningful relationship between people and the land. By drawing from the site's existing qualities and opportunities, the project reinforces local social and cultural patterns, fostering a shared landscape that enhances everyday life while supporting broader urban resilience.

site history

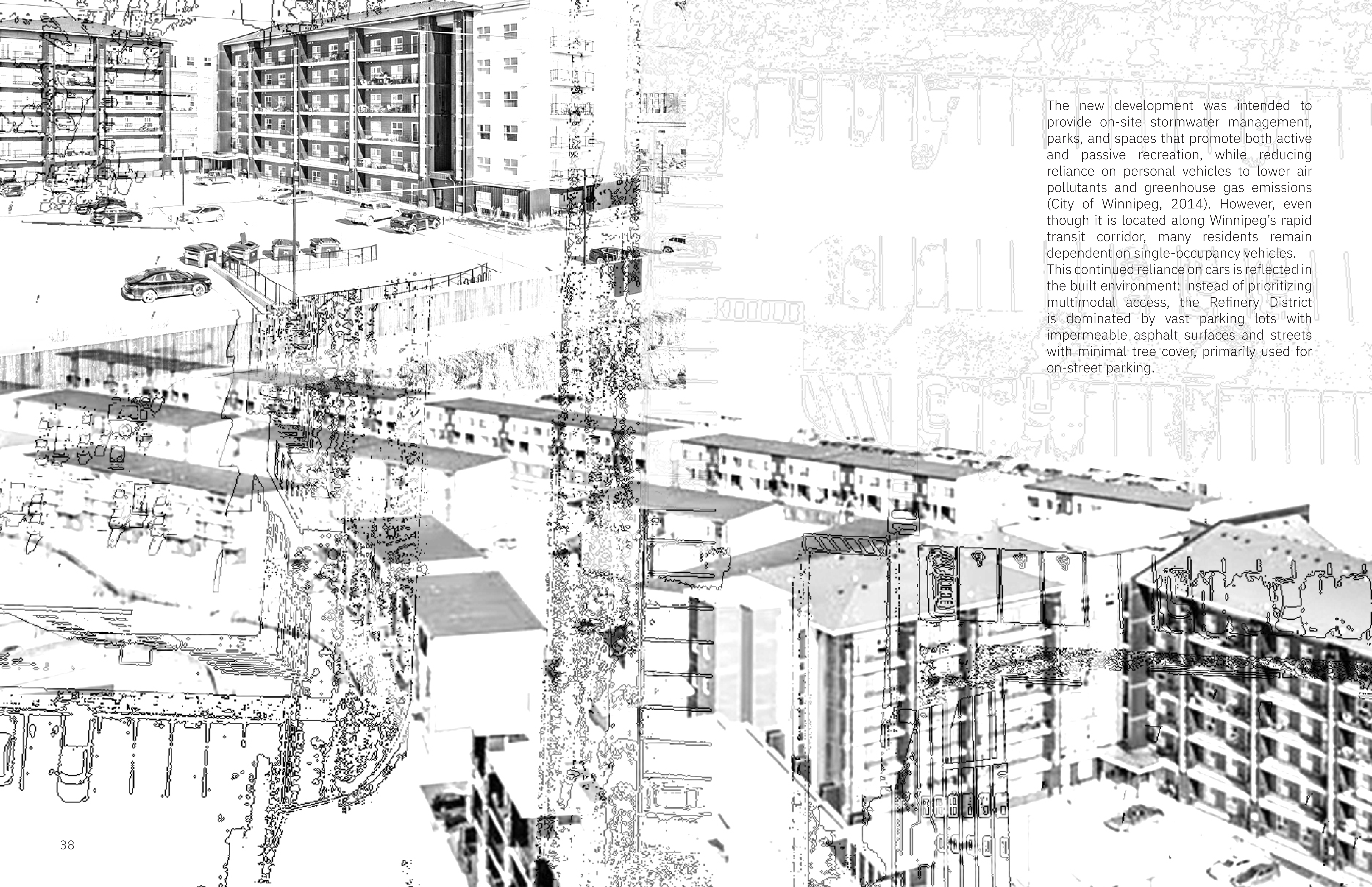
The site was previously owned by the Sugar Beet Factory, constructed between 1939 and 1940, the site played a significant role in Winnipeg's industrial growth by processing sugar beets into refined sugar. The factory ceased operations in 1997, marking the end of an era for local industry (Manitoba Historical Society Archives, n.d).

During its operation, the site was used to store lime mud residue, a byproduct of sugar refining. After the factory's closure, the area south of the fenced Refinary District was used as a lime mud landfill. (Manitoba Historical Society Archives, n.d). Over time, it became neglected and overgrown with spontaneous vegetation, with ecological succession severely limited by disturbed soils that struggled to support a diverse ecosystem.

As urban development expanded throughout Winnipeg, the Chevrier neighborhood began transitioning from a predominantly M2 industrial zone into a more diverse urban fabric that integrates new residential, mixed-use, industrial, and commercial developments with the existing industrial fabric.

Building on this transformation, the City of Winnipeg has implemented a new development strategy to further revitalize approximately 131 acres of land through a mixed-use plan that combines medium to high-density housing with commercial and industrial functions, forming what is now known as the Refinery District (City of Winnipeg, 2014).This plan aims to establish a dynamic neighborhood that supports both residential life and economic activity while redefining the area's identity within Winnipeg's evolving urban landscape, with full build-out expected to unfold gradually since the timing of development is not fixed and will depend on market conditions and the rate of development.

MANITOBA SUGAR COMPANY

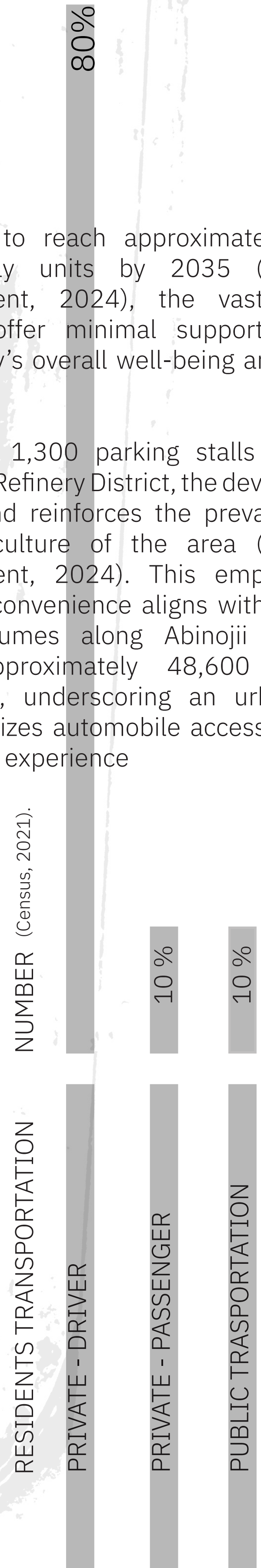


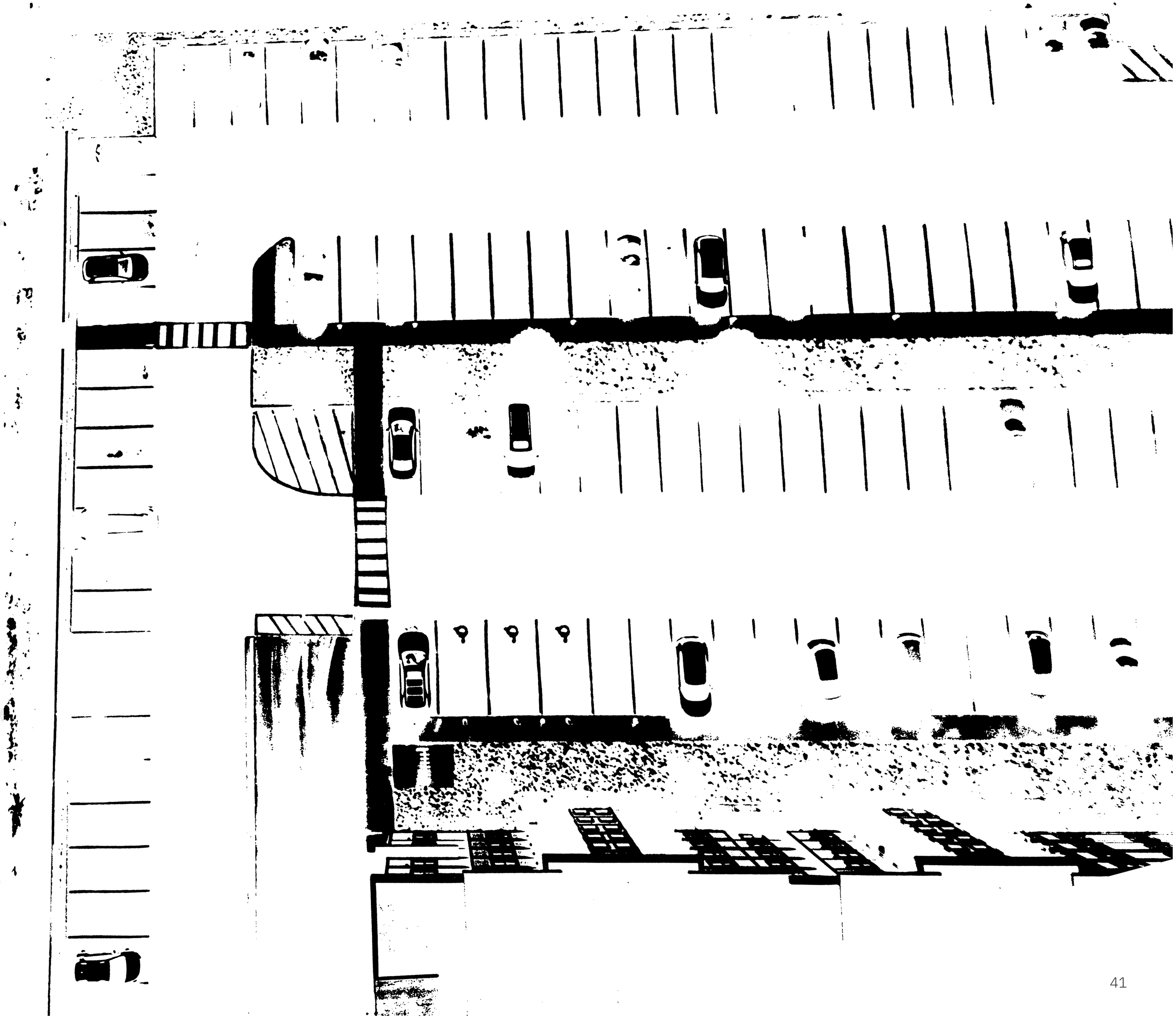
The new development was intended to provide on-site stormwater management, parks, and spaces that promote both active and passive recreation, while reducing reliance on personal vehicles to lower air pollutants and greenhouse gas emissions (City of Winnipeg, 2014). However, even though it is located along Winnipeg's rapid transit corridor, many residents remain dependent on single-occupancy vehicles.

This continued reliance on cars is reflected in the built environment: instead of prioritizing multimodal access, the Refinery District is dominated by vast parking lots with impermeable asphalt surfaces and streets with minimal tree cover, primarily used for on-street parking.

Projected to reach approximately 2,000 multi-family units by 2035 (Hopewell Development, 2024), the vast asphalt surfaces offer minimal support for the community’s overall well-being and quality of life.

With over 1,300 parking stalls provided within the Refinery District, the development reflects and reinforces the prevailing car-oriented culture of the area (Hopewell Development, 2024). This emphasis on vehicular convenience aligns with the high traffic volumes along Abinojii Mikanah, where approximately 48,600 vehicles pass daily, underscoring an urban form that prioritizes automobile access over the pedestrian experience





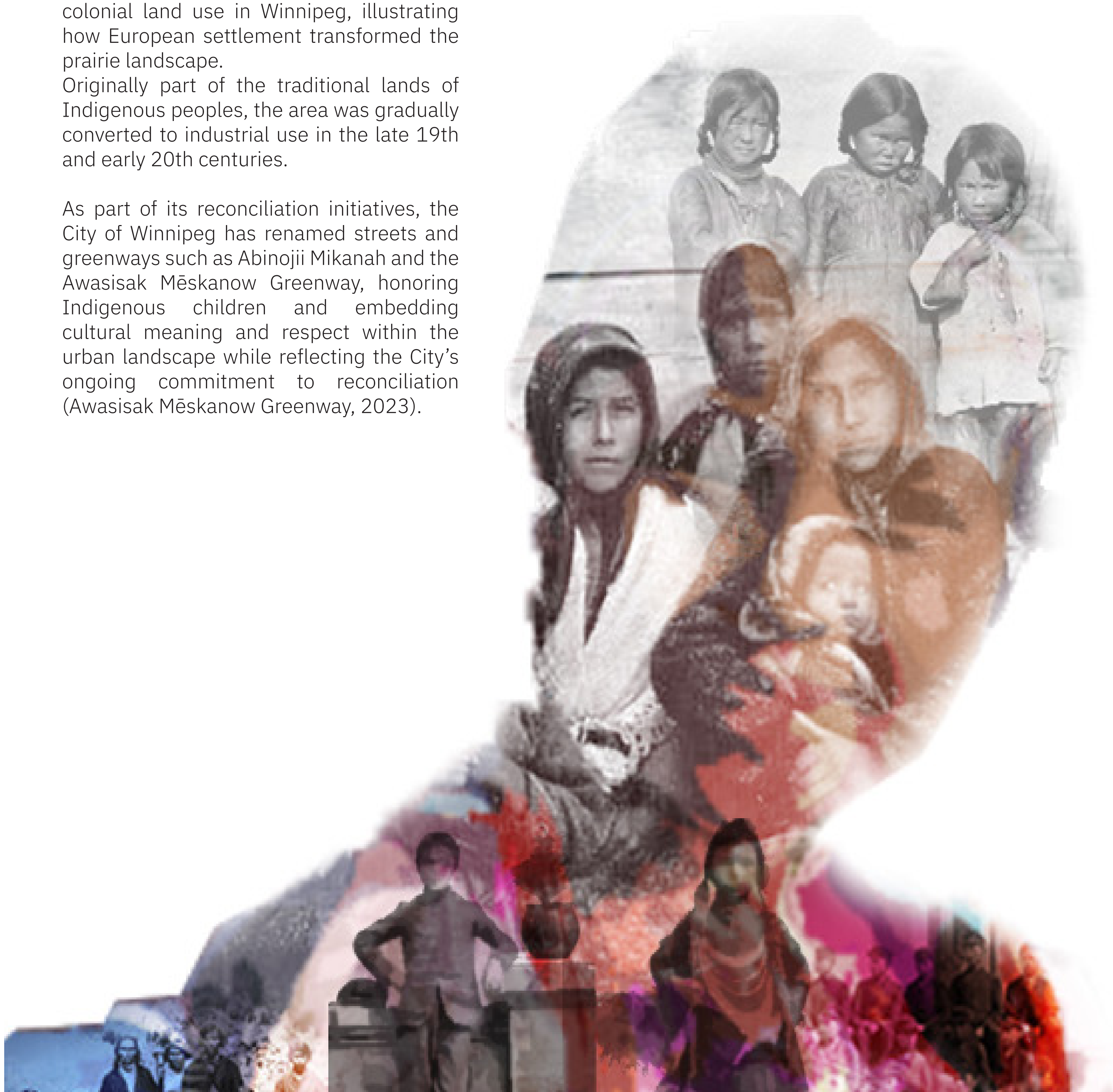
Hidden behind a fence south of the Refinery District, the green corridor along Abinojii Mikanah offers an opportunity to provide residents with a meaningful place to connect with both the landscape and one another. Although this open space has not yet been considered in the urban design, this practicum seeks to address that oversight.

The proposal envisions transforming the area into a public space where infrastructure and everyday life merge with a sense of wonder, creating a functional yet enchanting landscape where daily activities, ecological systems, and essential infrastructure coexist seamlessly.

site cultural background

The site reflects the broader history of colonial land use in Winnipeg, illustrating how European settlement transformed the prairie landscape.
Originally part of the traditional lands of Indigenous peoples, the area was gradually converted to industrial use in the late 19th and early 20th centuries.

As part of its reconciliation initiatives, the City of Winnipeg has renamed streets and greenways such as Abinojii Mikanah and the Awasisak Mēskanow Greenway, honoring Indigenous children and embedding cultural meaning and respect within the urban landscape while reflecting the City's ongoing commitment to reconciliation (Awasisak Mēskanow Greenway, 2023).



HONOR

RESPECT

RECONCILE

Anishinaabemowin | Ojibwe

ABINOJII child

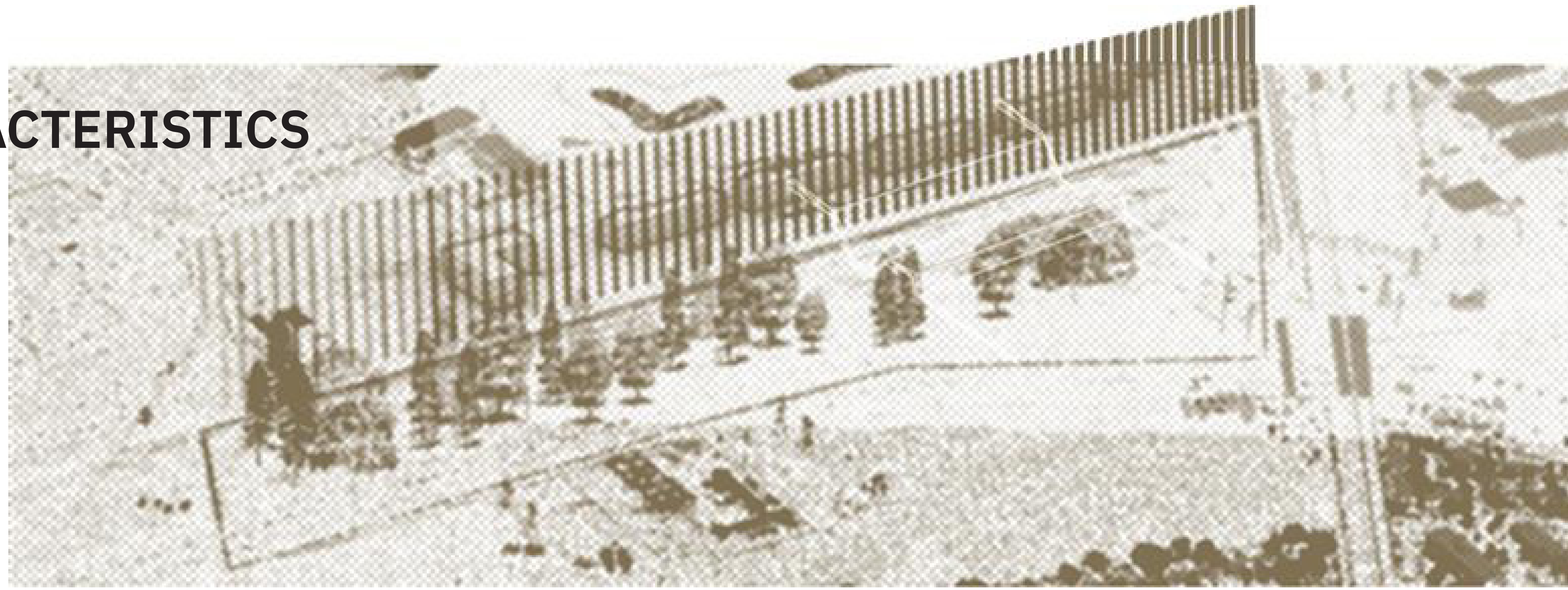
MIKANAH way

Ininimowin | Cree

AWASISAK child

MēSKANOW pathway

SITE CHARACTERISTICS

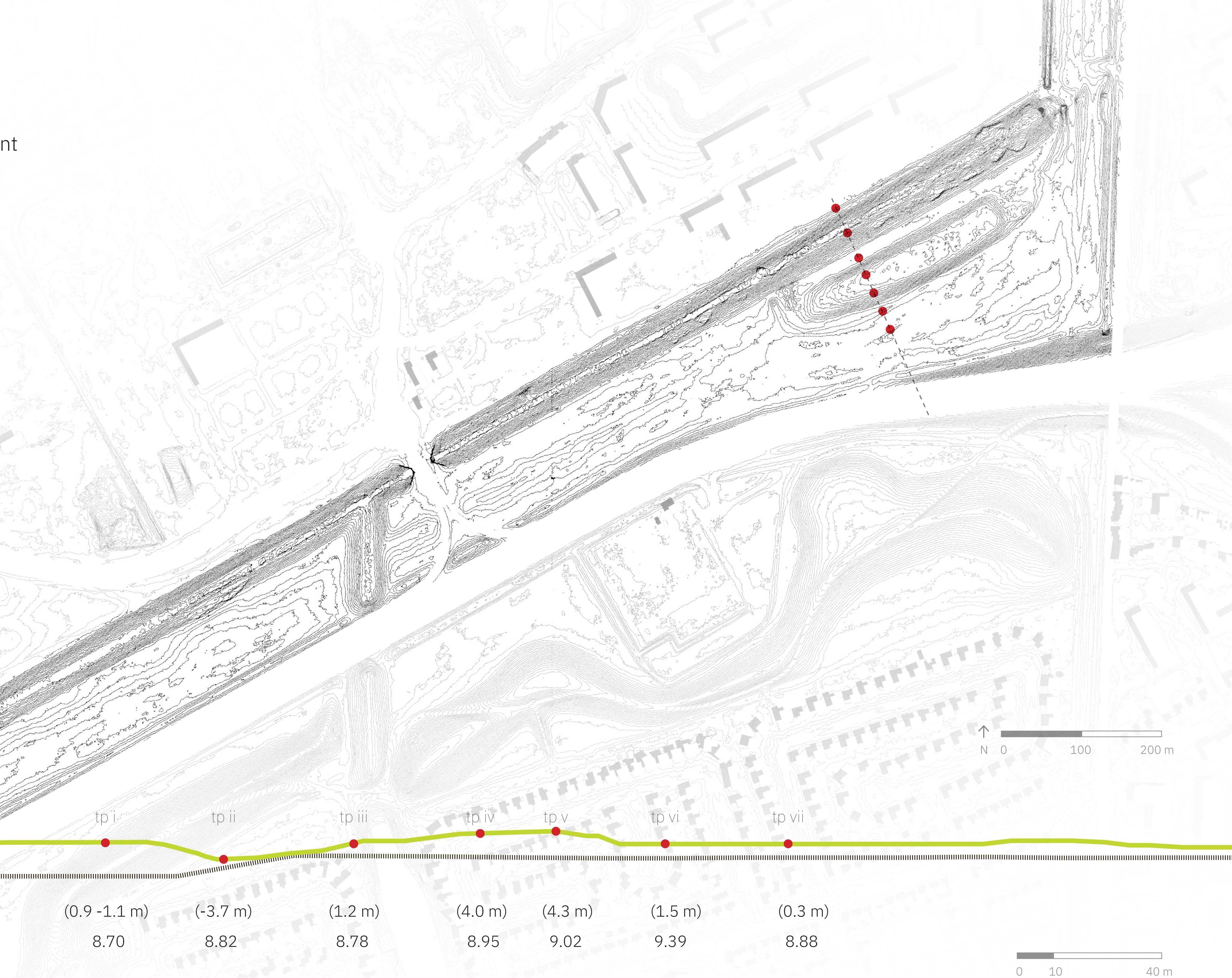


soil

lime mud-impacted soil assessment

The site's soil was primarily covered with non hazardous lime mud, which had been largely stored in the southern portion of the property. Soil examinations revealed elevated pH levels ranging from 8.3 to 9.13, indicating highly alkaline conditions that can hinder plant growth and disrupt soil health.

Despite these concerns, laboratory analyses showed that the concentrations of trace metals in the lime mud remained within the acceptable limits established by the Canadian Council of Ministers of the Environment (CCME), suggesting minimal risk of environmental or health impacts due to chemical contamination, according to the assessments conducted (City of Winnipeg, 2007).



soil

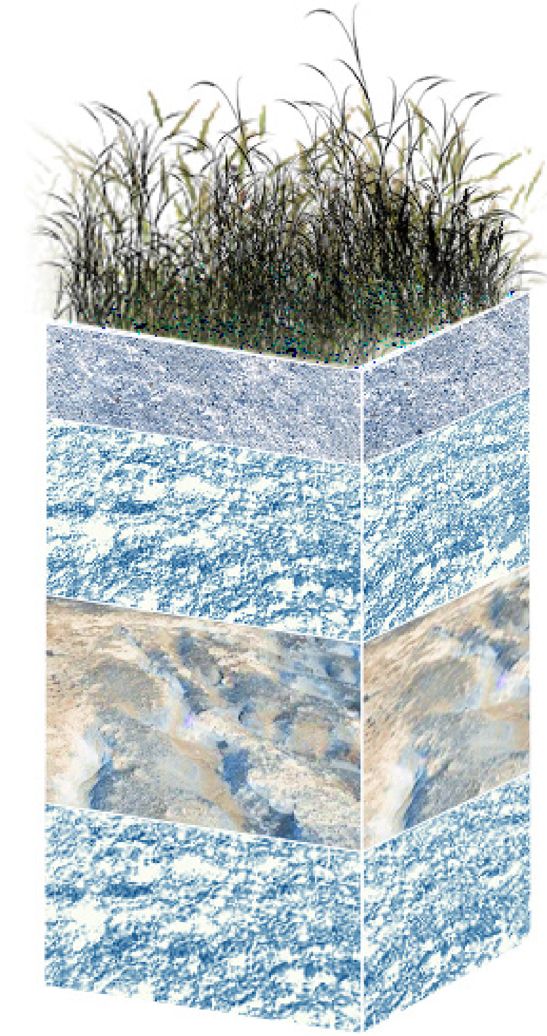
on-site soil remediation

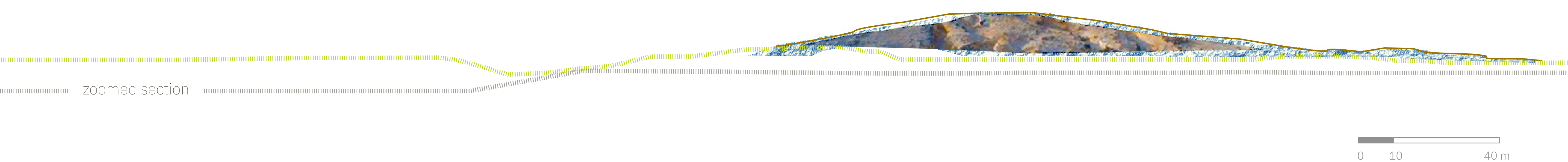
The City of Winnipeg conducted soil remediation on site to remove the lime mud residue using an on-site reuse strategy, transforming the industrial byproduct into a stabilized landscape by reallocating lime mud into a berm. To prevent direct human and animal contact, the berm were capped with clay, topsoil and planted with grasses to stabilize the soil and reduce erosion.

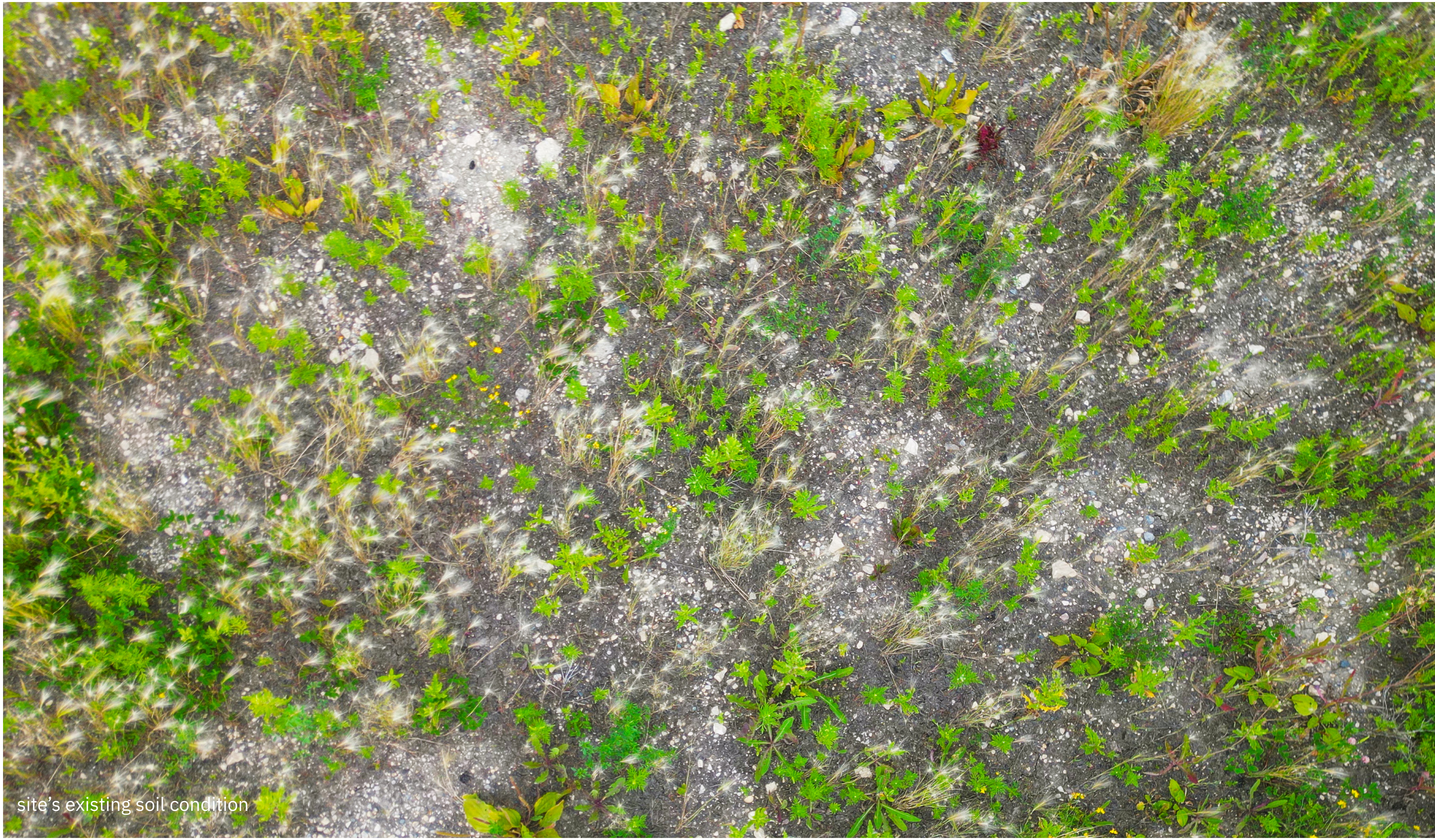
The capping system also helps minimize the potential for alkaline substances to leach into groundwater, addressing environmental concerns while establishing a foundation for future redevelopment and ecological restoration (City of Winnipeg, 2007).

To maintain these benefits, future interventions should be carefully managed to avoid unnecessary soil disturbance. Any soil removed for topographic modifications should be retained on-site using a cut-and-fill approach to preserve soil integrity.

berm soil condition





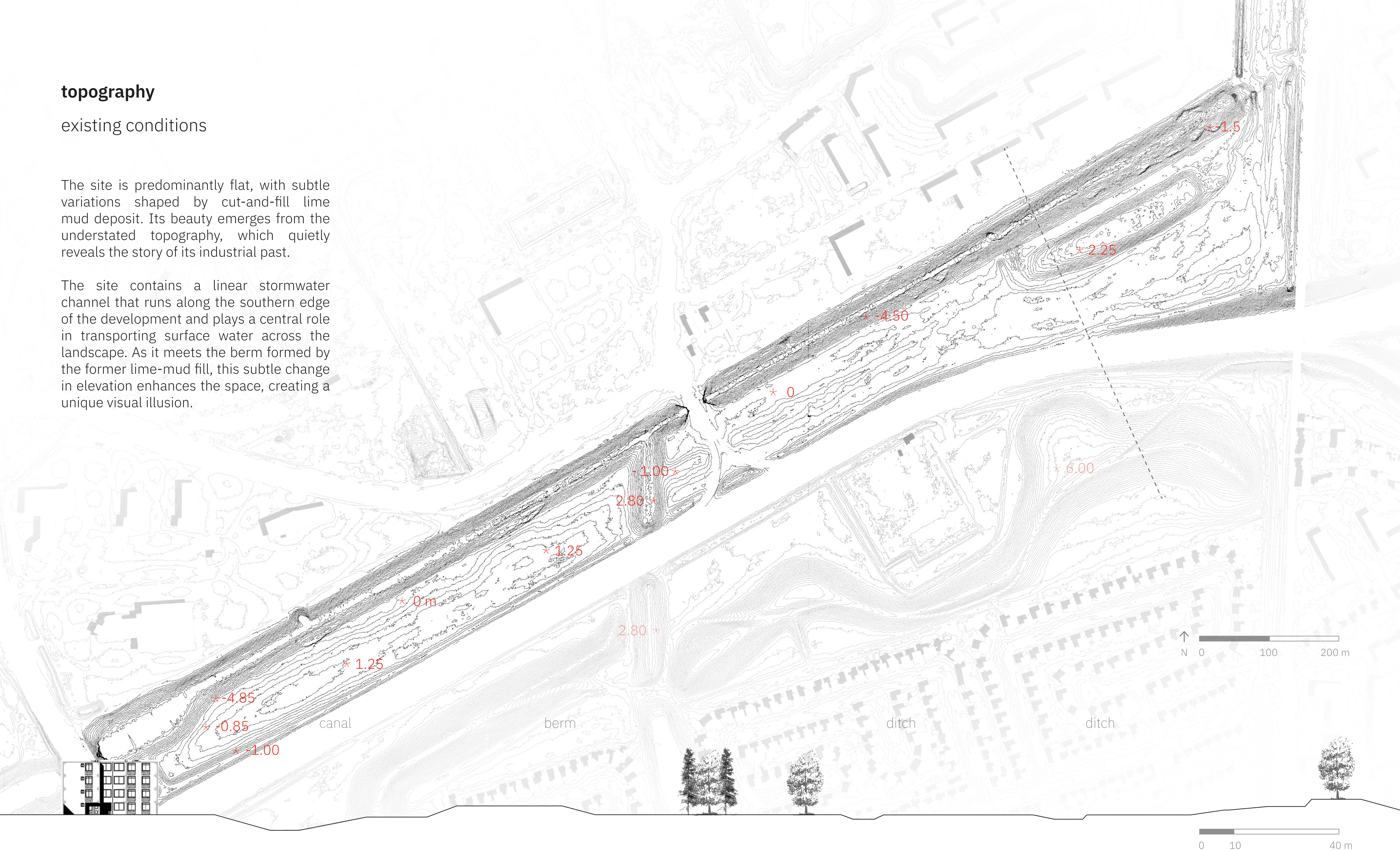

site's existing soil condition

topography

existing conditions

The site is predominantly flat, with subtle variations shaped by cut-and-fill lime mud deposit. Its beauty emerges from the understated topography, which quietly reveals the story of its industrial past.

The site contains a linear stormwater channel that runs along the southern edge of the development and plays a central role in transporting surface water across the landscape. As it meets the berm formed by the former lime-mud fill, this subtle change in elevation enhances the space, creating a unique visual illusion.




the berm and canal interface

water system

existing conditions

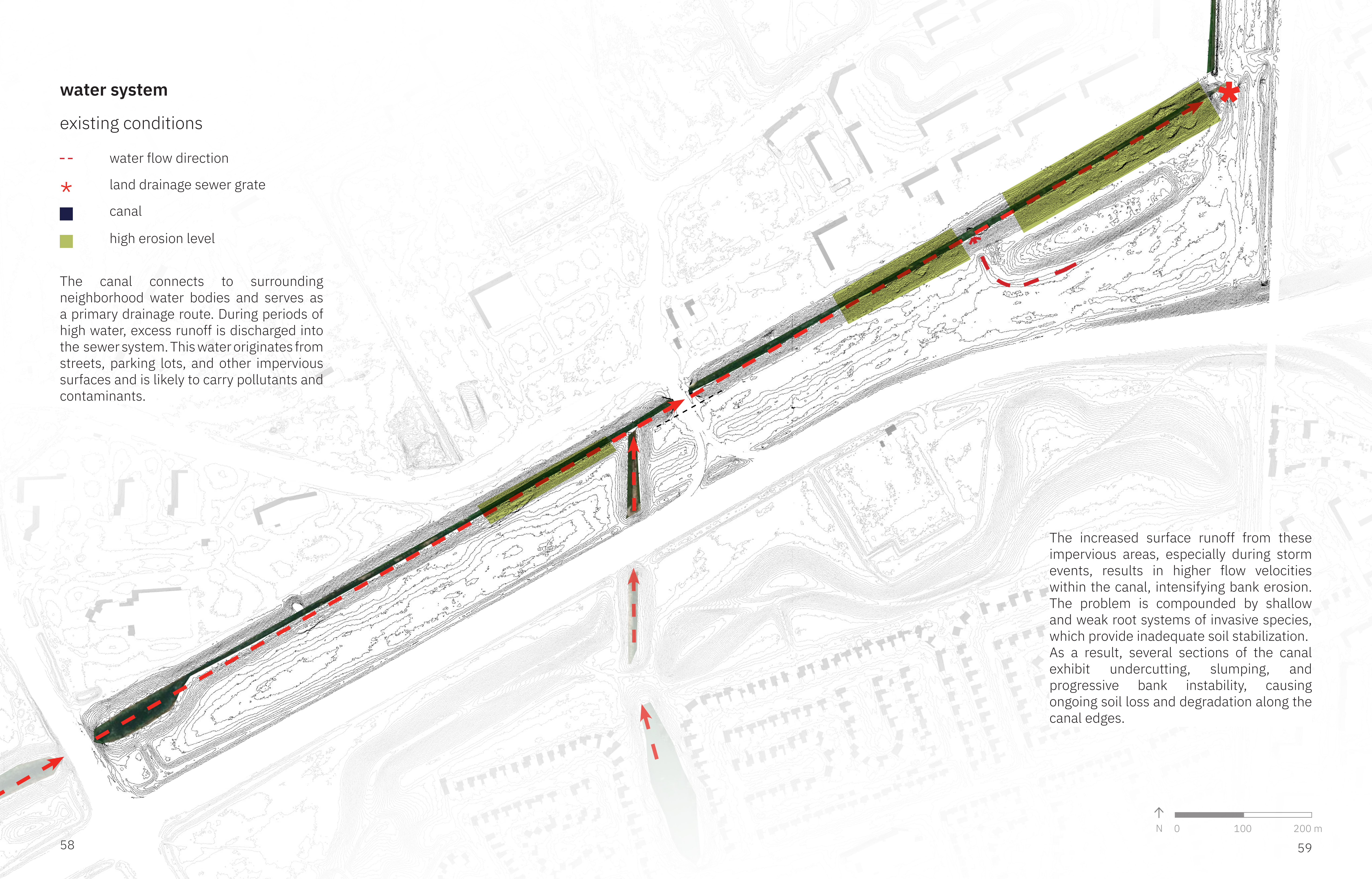
- - water flow direction

* land drainage sewer grate

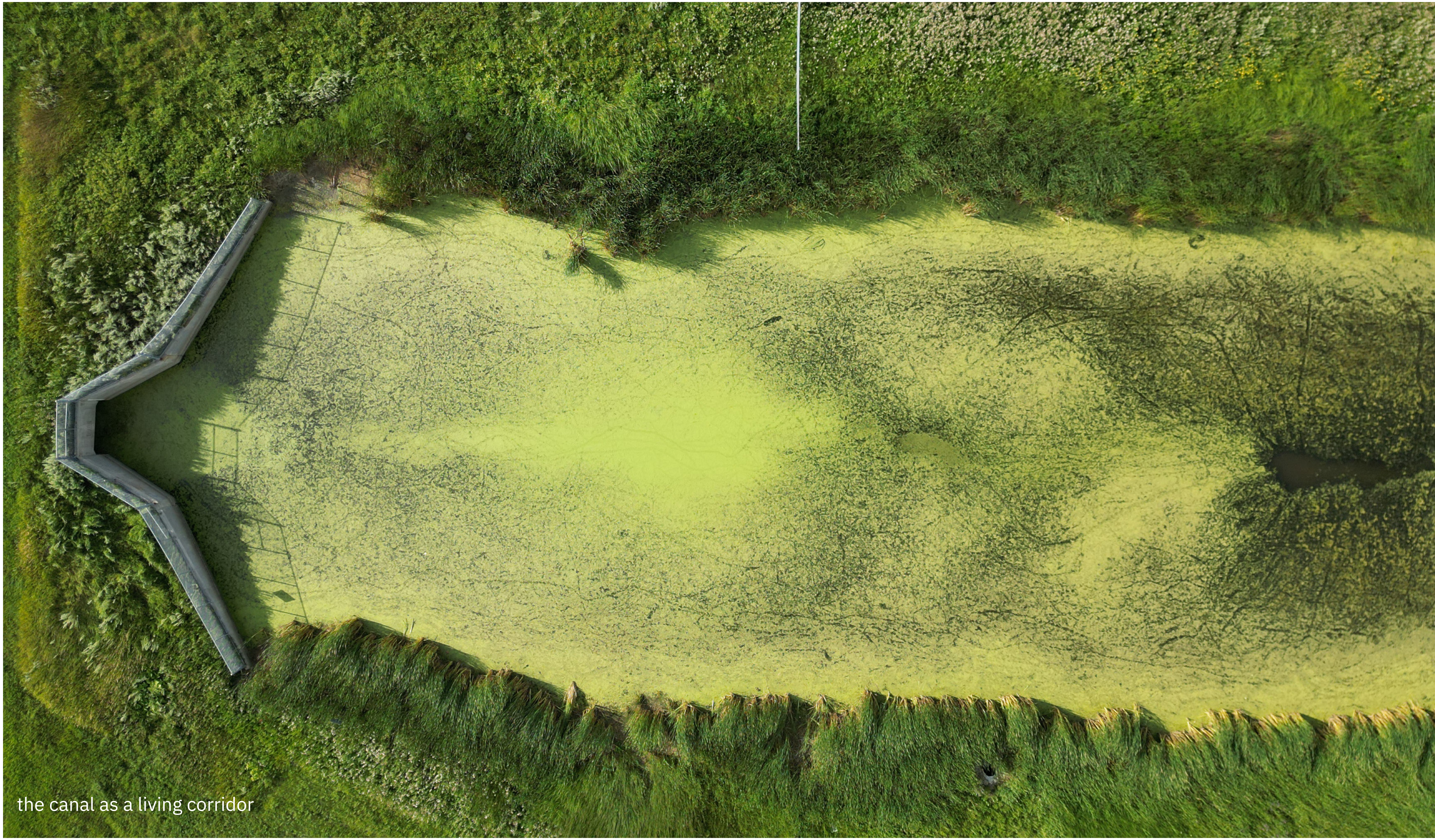
■ canal

■ high erosion level

The canal connects to surrounding neighborhood water bodies and serves as a primary drainage route. During periods of high water, excess runoff is discharged into the sewer system. This water originates from streets, parking lots, and other impervious surfaces and is likely to carry pollutants and contaminants.



The increased surface runoff from these impervious areas, especially during storm events, results in higher flow velocities within the canal, intensifying bank erosion. The problem is compounded by shallow and weak root systems of invasive species, which provide inadequate soil stabilization. As a result, several sections of the canal exhibit undercutting, slumping, and progressive bank instability, causing ongoing soil loss and degradation along the canal edges.



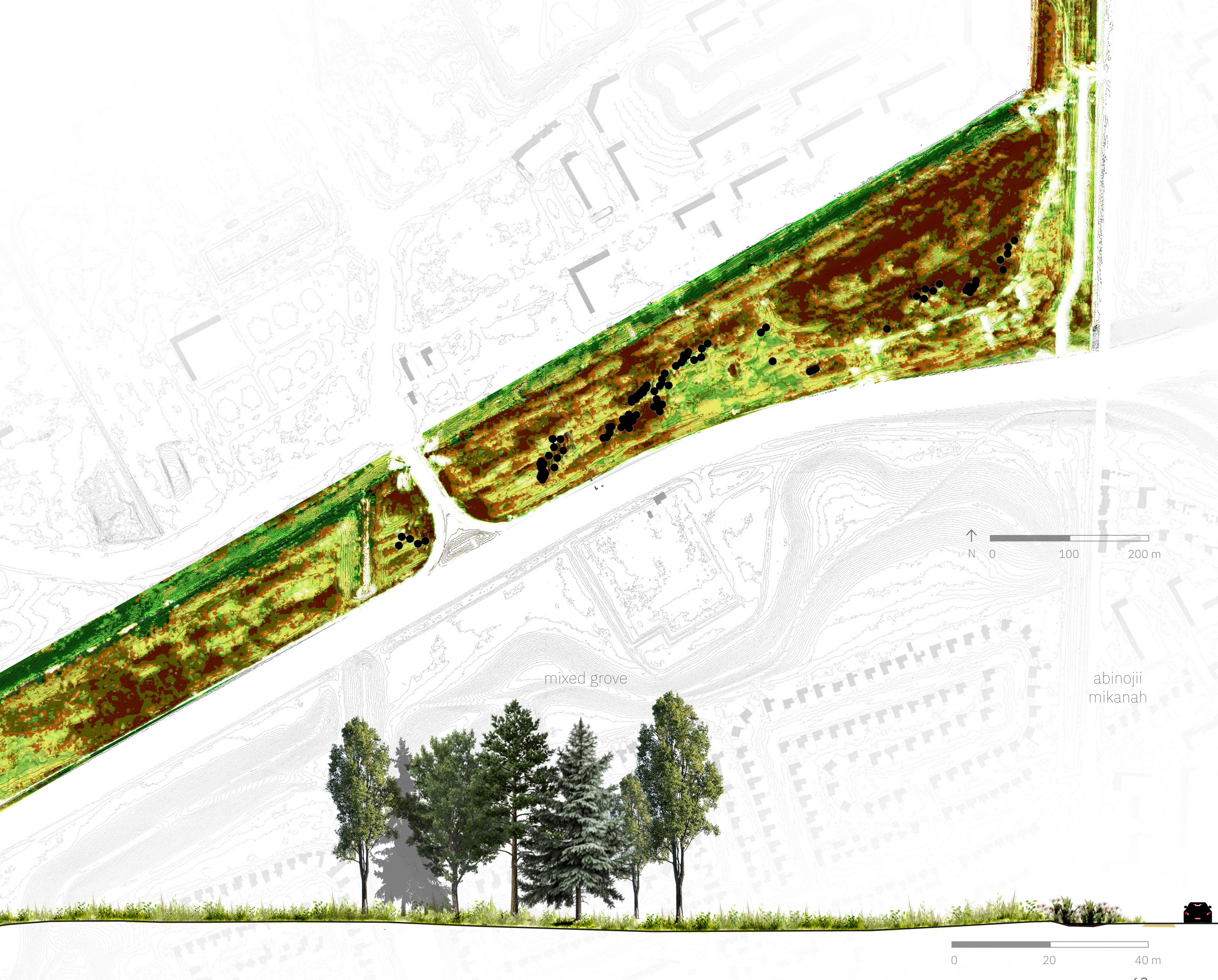
the canal as a living corridor

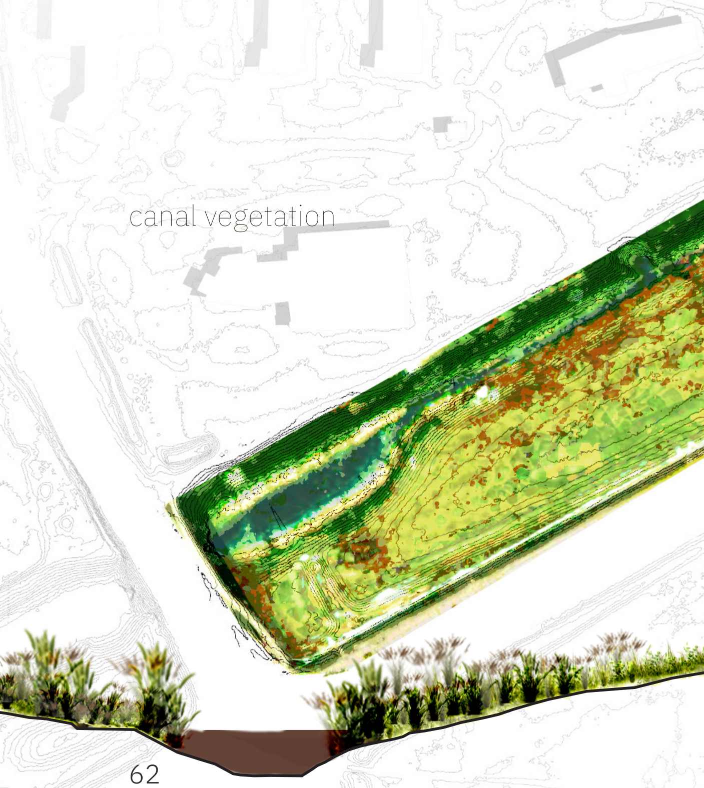
vegetation

existing conditions

- hydrophilic vegetation
- mowed meadow
- prairie tallgrass
- deciduous/coniferous groves

Vegetation on site is predominantly composed of invasive species due to two main factors: historically disturbed soil, which has prevented native plant establishment, and maintenance practices that, while regular, focus primarily on mowing. A more diverse and ecologically informed maintenance approach could support native species and enhance biodiversity, promoting a healthier prairie ecosystem.





trees

existing condition

The fragmented trees lacks continuity and varies greatly in density and maturity. Younger trees dominate much of the landscape, suggesting recent growth, while occasional mature individuals hint at earlier stages of succession.

While the overall treea are fragmented, it still plays an important ecological role by creating scattered habitat pockets and subtle microclimates across the site. The existing conditions and species together serve as the primary ecological framework for the design.

site’s vegetation mosaic

circulation

existing conditions

* blue rapid transit station

bicycle trail

secondary roads

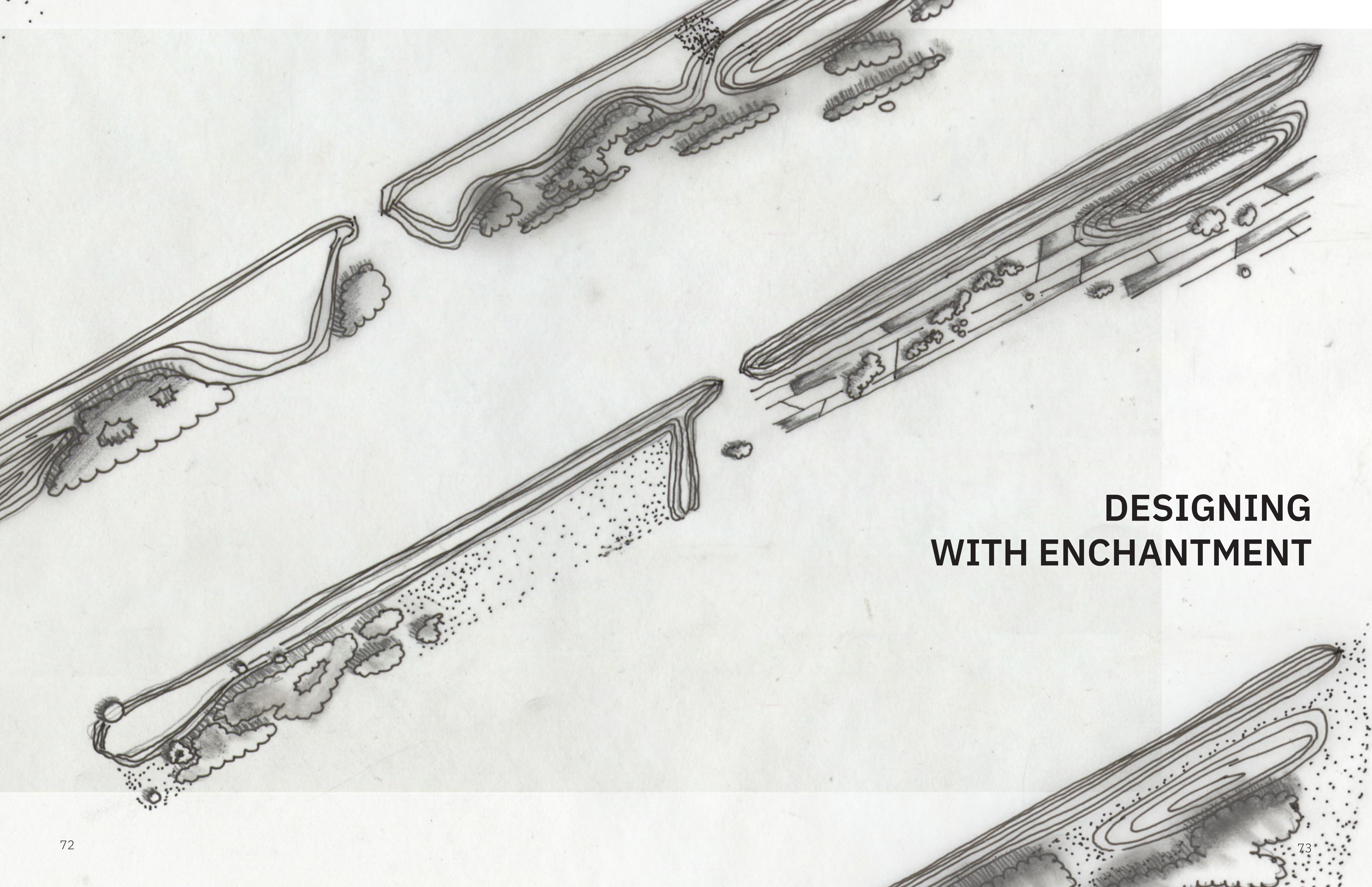
blue rapid transit

informal path

The new Refinery District benefits from strong connections to major roads, supporting the current reliance on private vehicles. It also connects to the adjacent rapid transit system, offering convenient public transportation options. However, pedestrian access remains fragmented. Where formal daily commute routes are inefficient for residents, informal human-made paths have emerged to meet their mobility needs, as observed south of the refinery fence.

The site presents a valuable opportunity to enhance active transportation by extending and connecting the existing bike and walking path systems along the Awasisak Mēskanow Greenway. Strengthening this network aligns with the city's goals to reduce car dependency while enhancing both social and ecological connectivity.

informal path south of the Refinery District fence, linking residences to the rapid transit station.



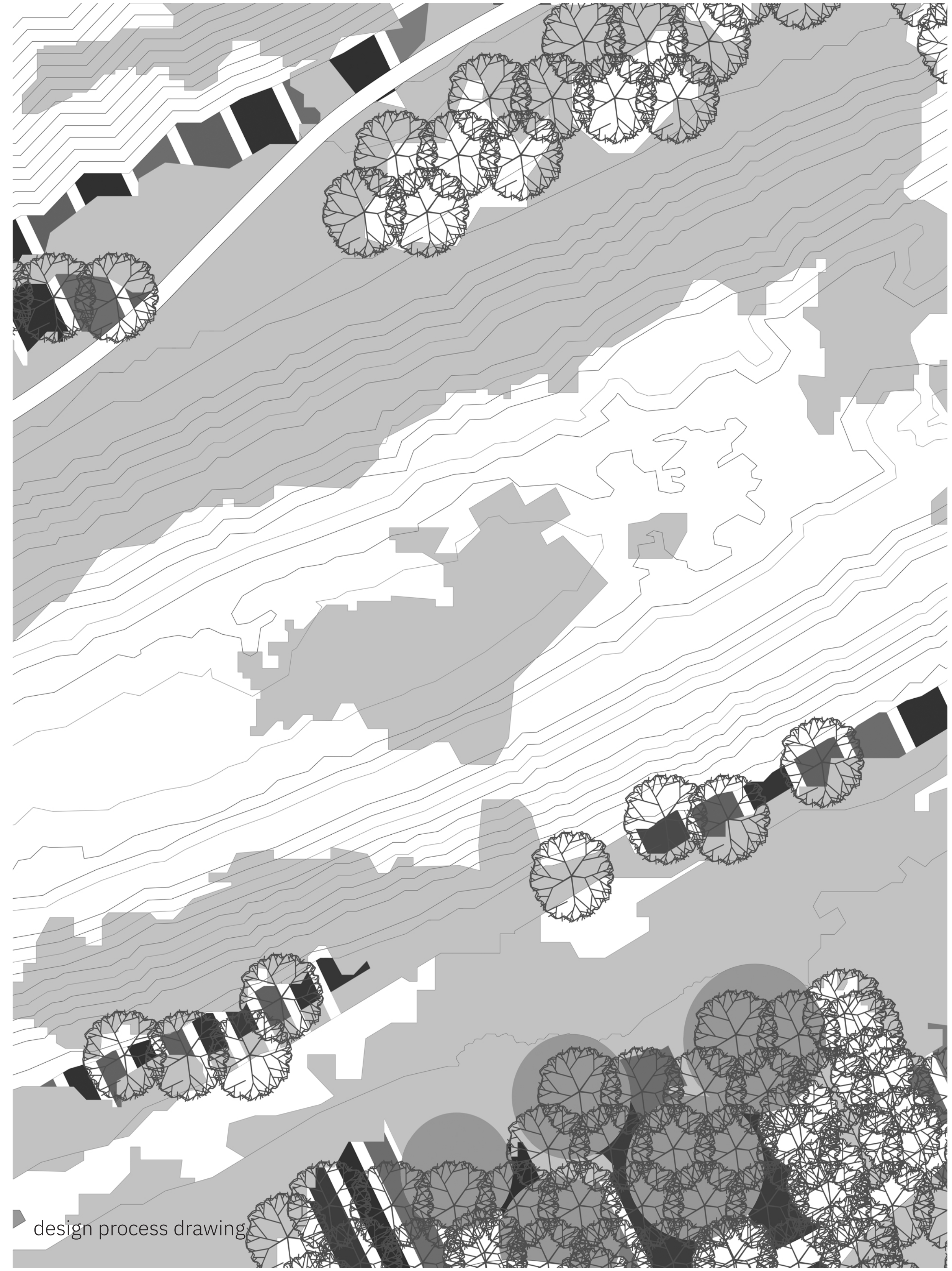
DESIGNING WITH ENCHANTMENT

enchanted green blue infrastructure

design framework

Enchanted Green Blue Infrastructure brings together ecological systems and community life, transforming a former industrial landscape into a living, connected, and resilient environment. It envisions the site as a social-ecological corridor that interlaces water, vegetation, and human activity through layered spatial experiences. Green Blue infrastructure forms the structural backbone, shaping stormwater systems that function as both ecological habitats and public spaces.

At the heart of the design, community gardens, fruit trees and shrubs create places of nourishment, learning, and gathering, where people connect through cultivation and the shared experience of the land. These productive landscapes strengthen local resilience and foster reciprocity between people and nature. Considering the site's higher soil pH levels, the design suggests general soil improvement measures to create more supportive growing conditions for vegetation. The overall approach emphasizes permeability, adaptability, and inclusivity, establishing a continuous landscape that supports biodiversity, encourages sustainable practices, and deepens the social connection between community and environment.



design process drawing

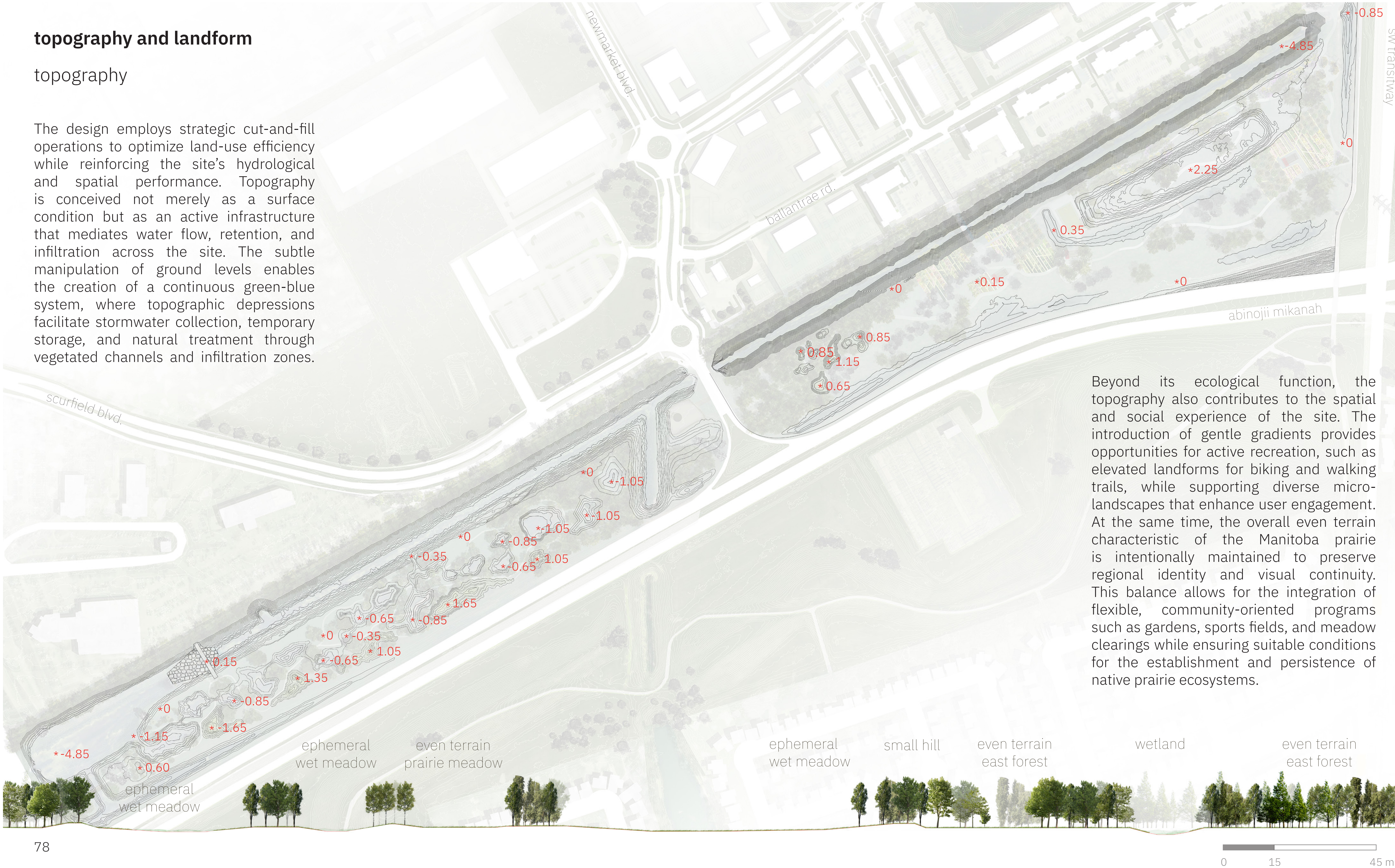
enchanted green blue infrastructure

master plan

topography and landform

topography

The design employs strategic cut-and-fill operations to optimize land-use efficiency while reinforcing the site's hydrological and spatial performance. Topography is conceived not merely as a surface condition but as an active infrastructure that mediates water flow, retention, and infiltration across the site. The subtle manipulation of ground levels enables the creation of a continuous green-blue system, where topographic depressions facilitate stormwater collection, temporary storage, and natural treatment through vegetated channels and infiltration zones.



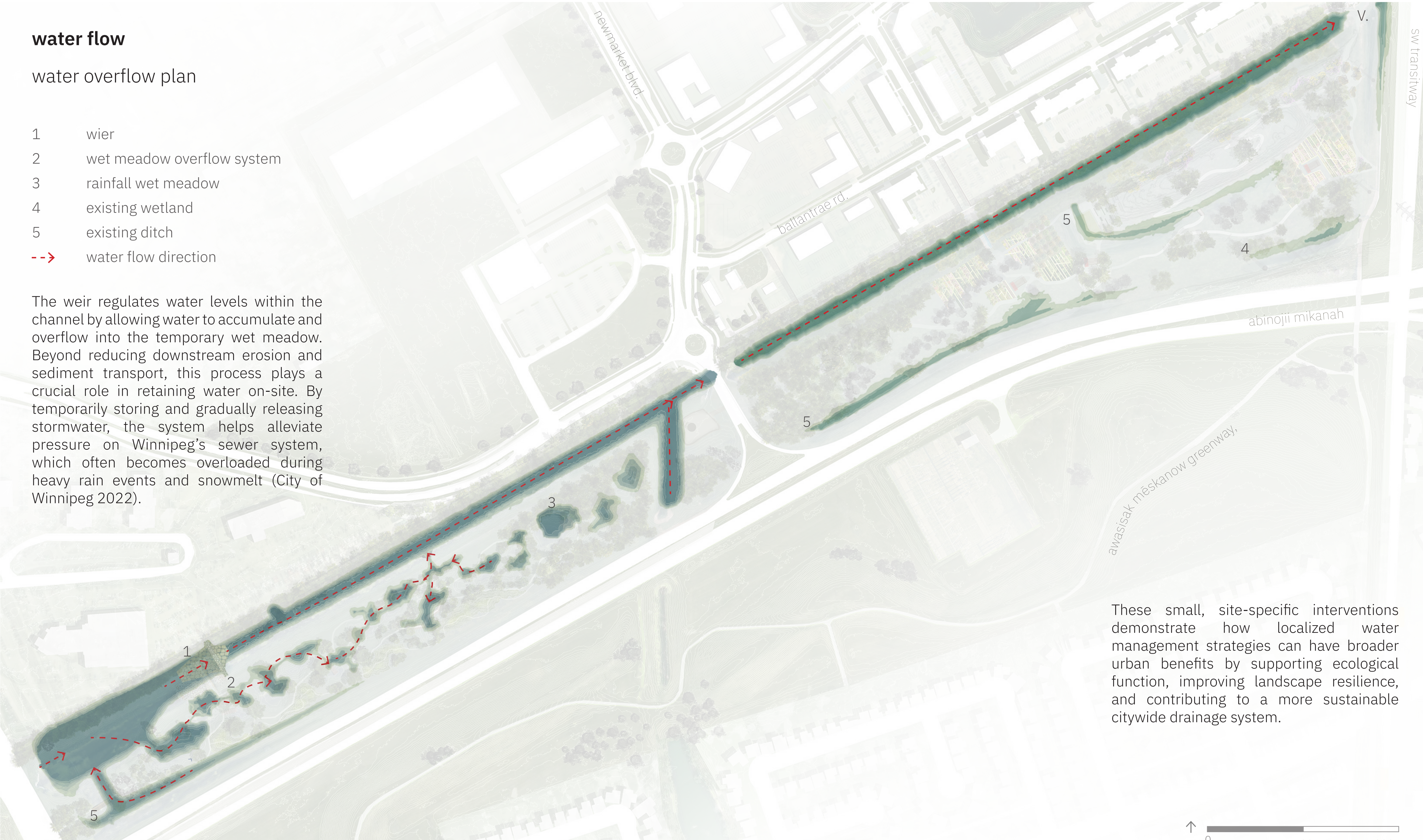
Beyond its ecological function, the topography also contributes to the spatial and social experience of the site. The introduction of gentle gradients provides opportunities for active recreation, such as elevated landforms for biking and walking trails, while supporting diverse micro-landscapes that enhance user engagement. At the same time, the overall even terrain characteristic of the Manitoba prairie is intentionally maintained to preserve regional identity and visual continuity. This balance allows for the integration of flexible, community-oriented programs such as gardens, sports fields, and meadow clearings while ensuring suitable conditions for the establishment and persistence of native prairie ecosystems.

water flow

water overflow plan

1 wier
2 wet meadow overflow system
3 rainfall wet meadow
4 existing wetland
5 existing ditch
- - -> water flow direction

The weir regulates water levels within the channel by allowing water to accumulate and overflow into the temporary wet meadow. Beyond reducing downstream erosion and sediment transport, this process plays a crucial role in retaining water on-site. By temporarily storing and gradually releasing stormwater, the system helps alleviate pressure on Winnipeg's sewer system, which often becomes overloaded during heavy rain events and snowmelt (City of Winnipeg 2022).



These small, site-specific interventions demonstrate how localized water management strategies can have broader urban benefits by supporting ecological function, improving landscape resilience, and contributing to a more sustainable citywide drainage system.

trees

trees plan

The tree design responds directly to the site's hydrological conditions, creating a layered and dynamic spatial composition. Variation in density, arrangement, and canopy structure reflects the movement and accumulation of water, translating hydrological dynamics into a living landscape. This complexity fosters ecological resilience, enhances biodiversity, and engages visitors by making the interplay between water and vegetation visually and experientially perceptible.

trees

tree species selection

The design uses native as well as hardy tree species to create a sustainable, low-maintenance urban forest that supports biodiversity, wildlife, and pollinators, while providing shade, seasonal interest, and aesthetic value.

orchard

pin cherry

Fruit color: Bright red when ripe

Harvest time: July–August in Manitoba

Use: The small, tart cherries are edible and best used for jellies, jams, or syrups they're quite sour when eaten raw.

chokecherry

Fruit color: Deep red to dark purple when ripe.

Harvest time: August–September in Manitoba

Use: The astringent berries are best cooked and used for jellies, syrups, wines, and traditional preserves

saskatoon

Fruit color: Purple to dark blue when ripe

Harvest time: June–July in Manitoba

Use: Sweet berries are eaten fresh, baked in pies, made into jams, jellies, or syrups, and are also valued in traditional Indigenous foods

wild plum

Fruit color: Reddish to purple with yellow flesh when ripe.

Harvest time: August in Manitoba

Use: The plums are eaten fresh, baked, or preserved as jams, jellies, and sauce

highbush cranberry

Fruit color: Bright red when ripe

Harvest time: September in Manitoba

Use: The tart berries are best cooked and used for jellies, sauces, or preserves

grassland, meadow and shrub vegetation

plan

- hydrophilic vegetation
- meadow
- prairie tallgrass
- willow thickets
- fruit shrubs

The planting design integrates a mosaic of tallgrass prairie, meadow, willow thicket, hydrophilic vegetation and shrubs to enhance ecological diversity and site character. The tallgrass and meadow areas provide habitat for pollinators and ground-nesting species, while their varied textures and seasonal colors enrich the visual experience. Willow thickets are established in wetter zones to stabilize soil, filter runoff, and create valuable wildlife shelter. Interspersed fruit-bearing shrubs contribute to the site's productivity, offering food for people and animals while reinforcing the connection between ecology and community use. Together, these plant communities create a dynamic and resilient landscape that evolves through the seasons.

grassland, meadow and shrub vegetation

fruitfully shrubs

Berries nourish both body and spirit, serving as a reminder of the deep reciprocity between people and the earth. To harvest from the land is not merely to take, but to participate in a cycle of giving.

(Kimmerer, 2013)

grassland, meadow and shrub vegetation

the enchantment of time in the prairie meadow

The prairie flower planting is intentionally designed to include species with staggered bloom times, ensuring that the site offers colour, texture, and visual interest throughout the entire growing season. Early, mid, and late-season blooms provide continuous nectar and pollen sources, supporting a diverse community of pollinators and other wildlife.

prairie grass growth

side-oats grama
blue grama

sweetgrass
big bluesteam
little bluesteam
prairie dropseed

prairie flower blooming

canada anemone
golgen alexander
wild bergamot
prairie crocus

showy milkweed
meadow blazing
wild bergamot
black-eyed susan
purlple prairie clover
prairie wild rose

smoth aster
stiff goldenrod
health aster

SPRING

SUMMER

LATE SUMMER | EARLY FALL

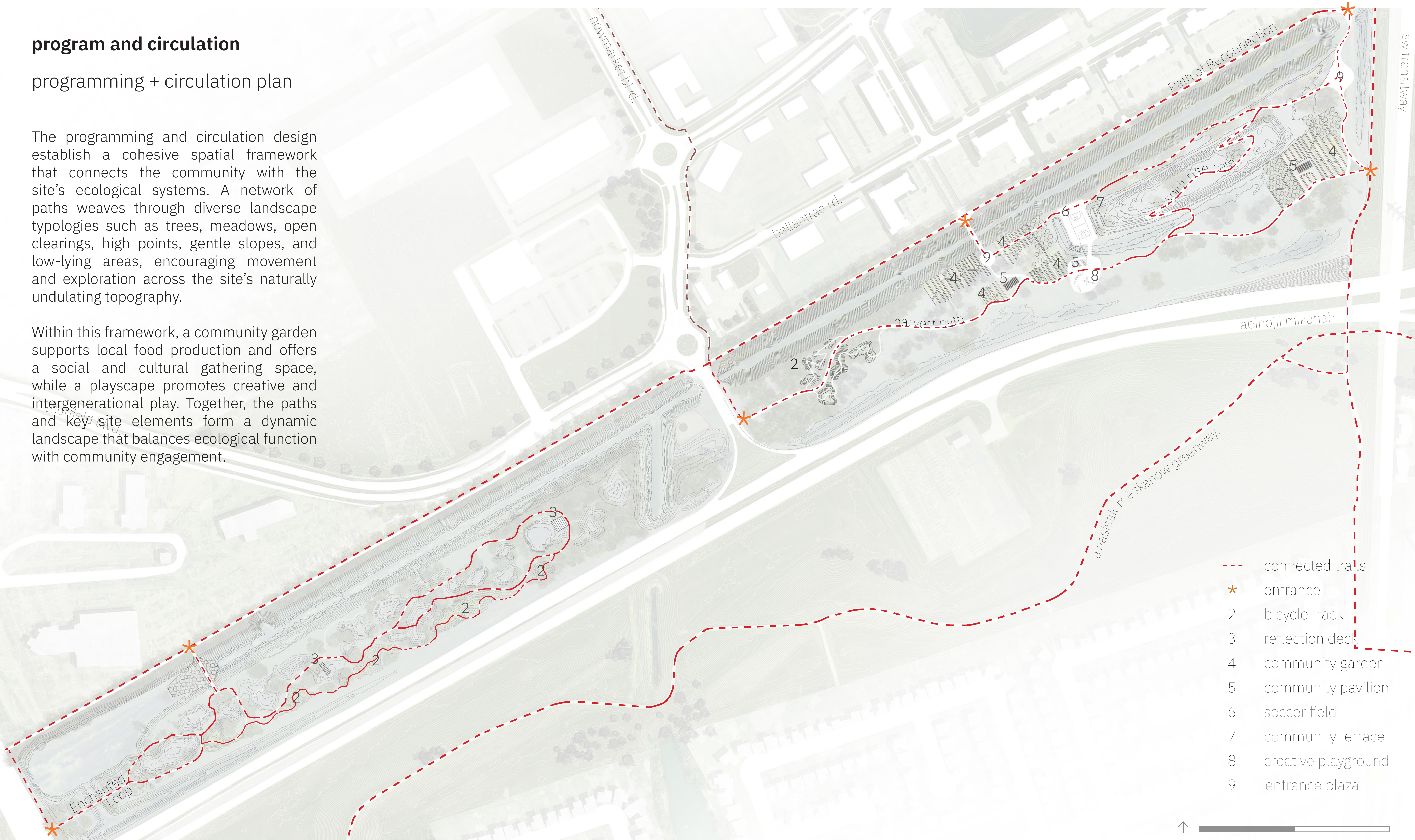
This temporal layering of blooms not only enhances the aesthetic experience for visitors but also strengthens biodiversity, creating a resilient and thriving habitat throughout the warmer months.

program and circulation

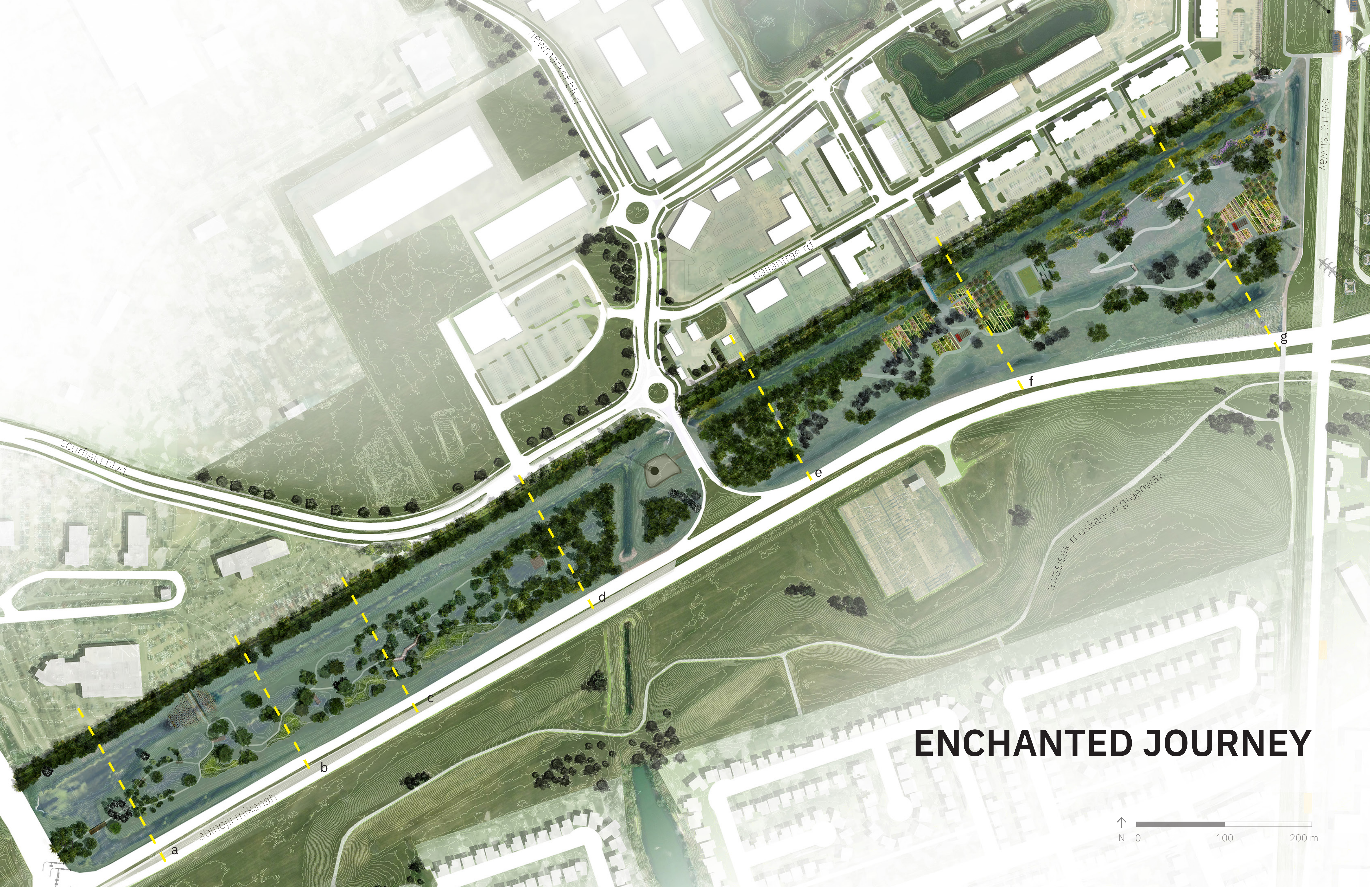
programming + circulation plan

The programming and circulation design establish a cohesive spatial framework that connects the community with the site's ecological systems. A network of paths weaves through diverse landscape typologies such as trees, meadows, open clearings, high points, gentle slopes, and low-lying areas, encouraging movement and exploration across the site's naturally undulating topography.

Within this framework, a community garden supports local food production and offers a social and cultural gathering space, while a playscape promotes creative and intergenerational play. Together, the paths and key site elements form a dynamic landscape that balances ecological function with community engagement.



ENCHANTED JOURNEY



a - floodplain trees

ENCHANTED JOURNEY

SECTION ELEVATIONS

b - single trees and grove

car dealer parking | promenade | canal | scots pine | white ash grove | american basswod white ash grove | american basswod scots pine | white ash grove | ditch | abinojii mikanah

c - tree cluster

scurfield blvd. | promenade | willow thickets | canal | willow thickets | paper birch | white spruce trembling aspen forest | paper birch | white spruce trembling aspen forest | ditch | abinojii mikanah

d - wet park forest

commercial business | promenade | willow thickets | canal | willow thickets | veggie forest | ditch | abinojii mikanah

e - fields park forest

f -community garden

The Enchanted Journey reveals the landscape as a layered experience an unfolding narrative of elevation, texture, and connection between people and place. Moving through the section, one encounters a dynamic interplay between built and natural systems: raised terraces that invite pause and gathering, gentle slopes that guide movement, and topographic depressions that collect water, nurturing diverse ecosystems. Each level tells a story of interaction, between soil and root, body and ground, light and shadow. This vertical exploration not only exposes the site's ecological processes but also highlights the human scale within it, transforming the act of movement into an enchanted passage through land, structure, and atmosphere. The section becomes more than a drawing; it is a story of transitions encounters a spatial sequence that connects the visitor to the ecological processes beneath their feet and the social life that unfolds above. Through this lens, the Enchanted Journey captures how elevation reveals hidden layers of the landscape, turning movement into an act of discovery, reflection, and connection.

g - the berm

WETLAND FORESTS

wetland forests

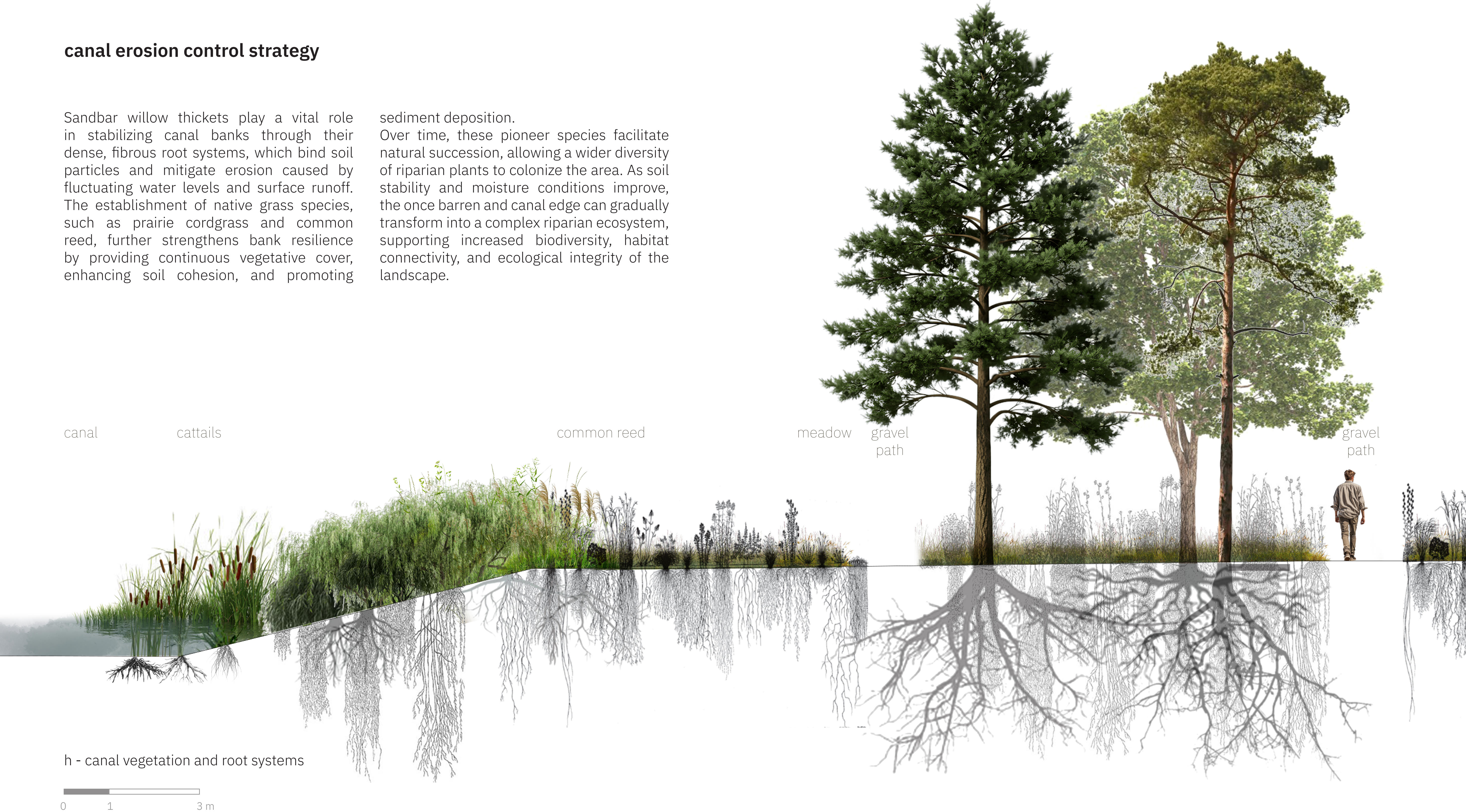
the weir

The weir plays a vital role in shaping the site's hydrological and ecological character. It regulates water levels within the canal, allowing water to accumulate and slowly overflow into adjacent wet meadow zones. By slowing and directing flow, the weir reduces downstream erosion and sediment transport, while supporting stable conditions for vegetation to establish along the banks.

This controlled water movement creates diverse microhabitats that attract birds, amphibians, and pollinators, enhancing the ecological richness of the corridor. Beyond its functional purpose, the weir also becomes a subtle landscape feature, a point of observation and reflection where people can witness the living relationship between water, land, and time.

canal erosion control strategy

Sandbar willow thickets play a vital role in stabilizing canal banks through their dense, fibrous root systems, which bind soil particles and mitigate erosion caused by fluctuating water levels and surface runoff. The establishment of native grass species, such as prairie cordgrass and common reed, further strengthens bank resilience by providing continuous vegetative cover, enhancing soil cohesion, and promoting sediment deposition.
Over time, these pioneer species facilitate natural succession, allowing a wider diversity of riparian plants to colonize the area. As soil stability and moisture conditions improve, the once barren and canal edge can gradually transform into a complex riparian ecosystem, supporting increased biodiversity, habitat connectivity, and ecological integrity of the landscape.

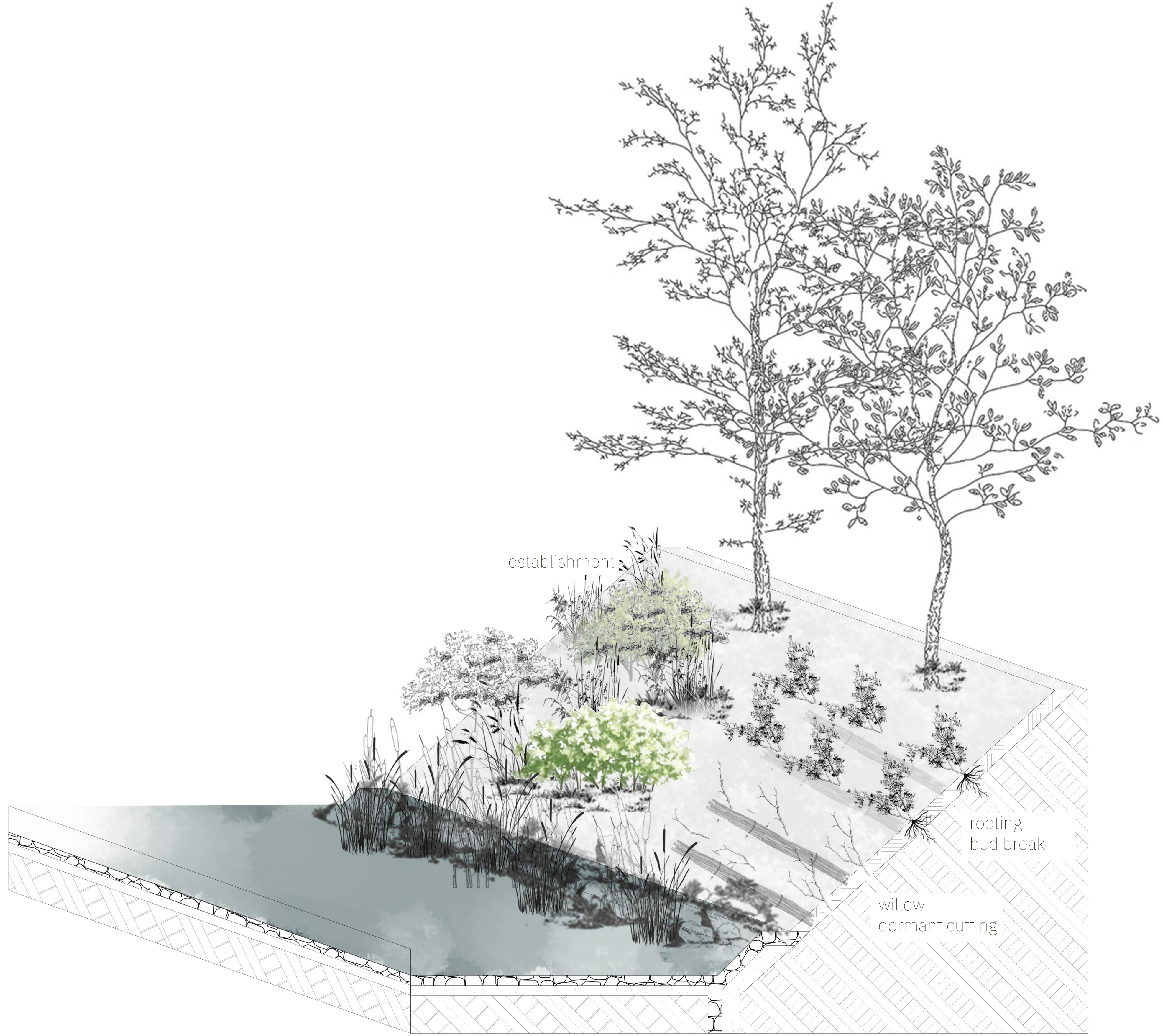


h - canal vegetation and root systems

canal erosion control strategy

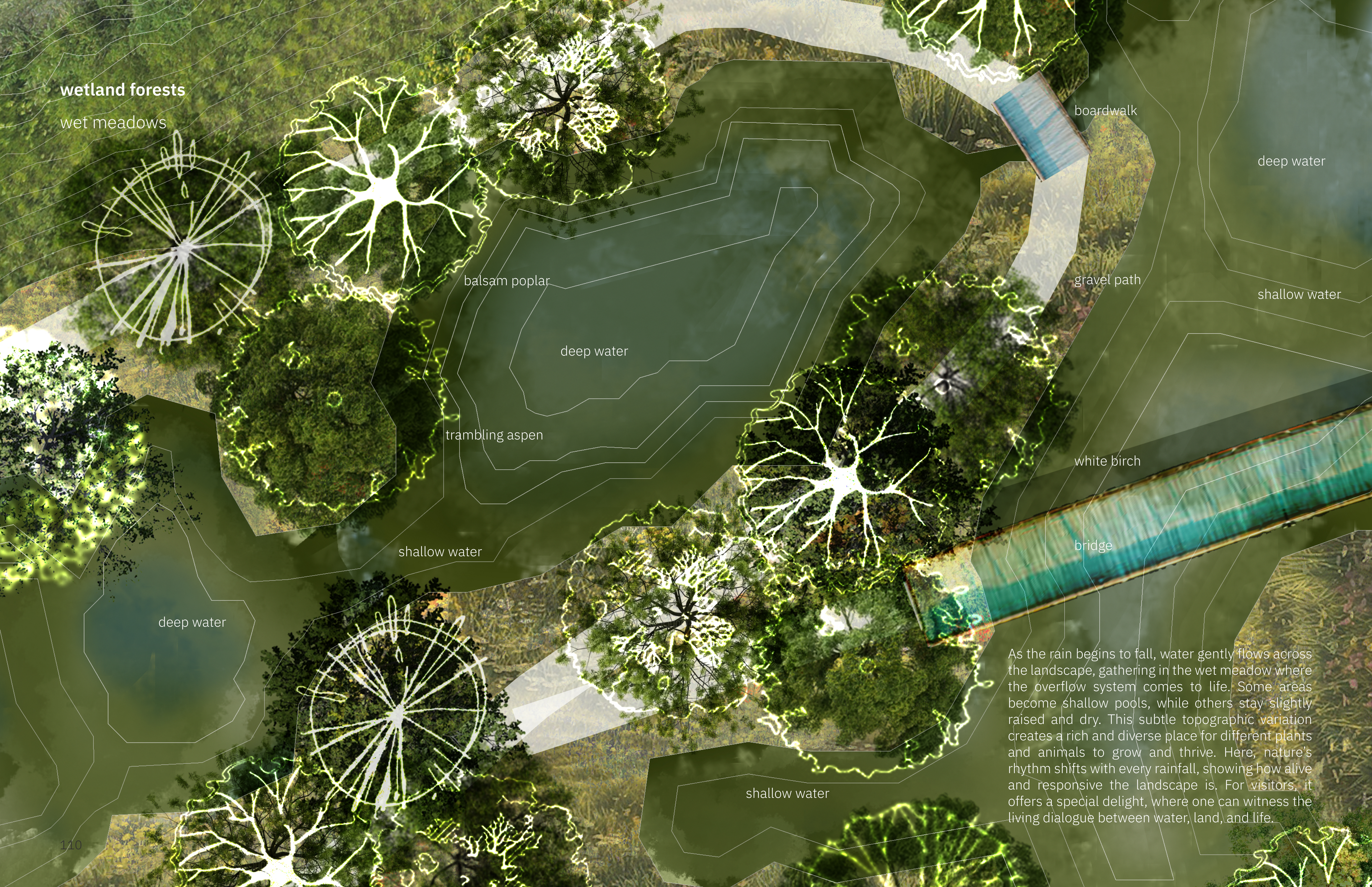
To protect the existing vegetation along the canal bank while promoting further stabilization, the live fascine technique offers a suitable and minimally invasive bioengineering approach. This method involves placing bundles of live willow branches (fascines) in shallow trenches along the contour of the slope, secured with wooden stakes. The fascines slow down surface runoff, trap sediment, and promote moisture retention, creating a favorable microenvironment for the regeneration of existing riparian plants (Nature Manitoba, 2006).

This technique supports the gradual natural succession of native species while maintaining the ecological continuity of the canal bank, ultimately transforming it into a more resilient and biodiverse riparian corridor.



wetland forests

wet meadows



As the rain begins to fall, water gently flows across the landscape, gathering in the wet meadow where the overflow system comes to life. Some areas become shallow pools, while others stay slightly raised and dry. This subtle topographic variation creates a rich and diverse place for different plants and animals to grow and thrive. Here, nature's rhythm shifts with every rainfall, showing how alive and responsive the landscape is. For visitors, it offers a special delight, where one can witness the living dialogue between water, land, and life.

wetland forests

willow savannah


FIELDS PARK
entrance
sw transitway
entrance plaza
fruit shrubs
grove
orchard
willow thickets
community garden
berm
orchard
fruit shrubs
entrance
grove
power lines
soccer field
boardwalk
wetland
grove
entrance
orchard
bridge
grove
grove
entrance plaza
pavillion
prairie tall grass
community garden
creative playground
ballantrae rd.
promenade
canal
bicycle track
veggie forest
entrance
newmarket blvd.
abinoji mikanah
awasisak meskanow greenway
N
0
50
100 m

fields park

bridging people with the land

The design connects the community with the land, creating not only a physical link but also a cultural and social one. By linking the site to the Refinery District and the Awasisak Mēskanow Greenway, the project extends the existing pathway that invites movement and gathering. Yet the connection goes beyond circulation; it is about building relationships. It is where neighbours meet, stories are shared, and the landscape becomes part of daily life again. Through culture, play, and gathering, the design encourages people to see the land not as something separate, but as something they belong to, a living part of the community.

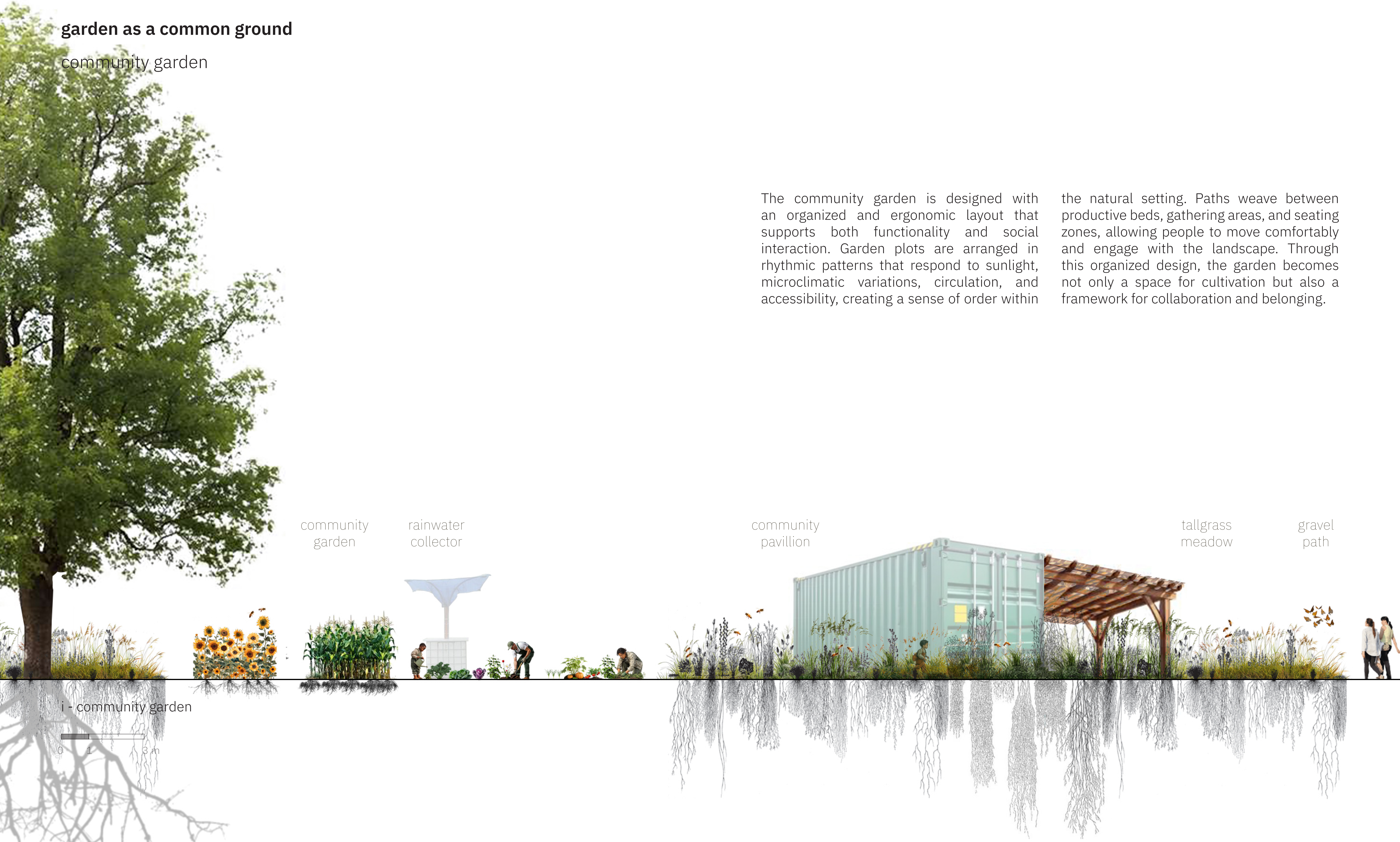
under the living trees


garden as a common ground

garden as a common ground

community garden

The community garden is designed with an organized and ergonomic layout that supports both functionality and social interaction. Garden plots are arranged in rhythmic patterns that respond to sunlight, microclimatic variations, circulation, and accessibility, creating a sense of order within the natural setting. Paths weave between productive beds, gathering areas, and seating zones, allowing people to move comfortably and engage with the landscape. Through this organized design, the garden becomes not only a space for cultivation but also a framework for collaboration and belonging.



garden as a common ground

community garden

fields park

playscapes for discovery and joy

The playscape is envisioned as a dynamic landscape for discovery and joy, a space that nurtures imagination, creativity, and social connection across all ages. Its design blends structured and unstructured play, offering a balance between safety, challenge, and freedom. Sculpted landforms, natural materials, and interactive features invite children to climb, balance, and explore, fostering physical development and creative problem-solving. At the same time, defined play zones, seating areas, and clear sightlines ensure comfort and accessibility for families and caregivers.

through play

seasonal perspectives

circulation + entrance

moving through the paths

REFLECTION

Enchanted Green Blue Infrastructure began as an exploration of how a neglected post industrial corridor could become more than a functional landscape. Throughout this process, the project evolved into a study of reconnection between ecological systems and human experience, between the site's past and its possible futures, and between the everyday needs of a community and the deeper sense of belonging that landscapes can cultivate. Working with what already exists, its water, landforms, vegetation, and cultural traces, revealed how design can strengthen natural systems rather than overwrite them, allowing the built and ecological to function as one integrated whole.

This practicum has shown me that green blue infrastructure is not only a technical solution but also social and cultural framework.

When ecological processes are woven with spaces for gathering, play, and shared stewardship, the landscape becomes an active participant in community life. It becomes a place that offers nourishment, memory, and reciprocity.

Through this work, I came to understand the importance of designing with humility, listening to the land, and recognizing its capacity to guide the form and meaning of the project. Enchanted Green Blue Infrastructure is ultimately a reminder that landscapes are living partners, spaces to learn from, to inhabit with care, and to cultivate for future generations. In reconnecting people and place, the project also shaped my own relationship with design and reaffirmed the role of landscape architecture as a practice rooted in responsibility, imagination, and hope.

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FIGURE CREDIT

Al images were created or captured by Vanessa dos Santos Alfonso.

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