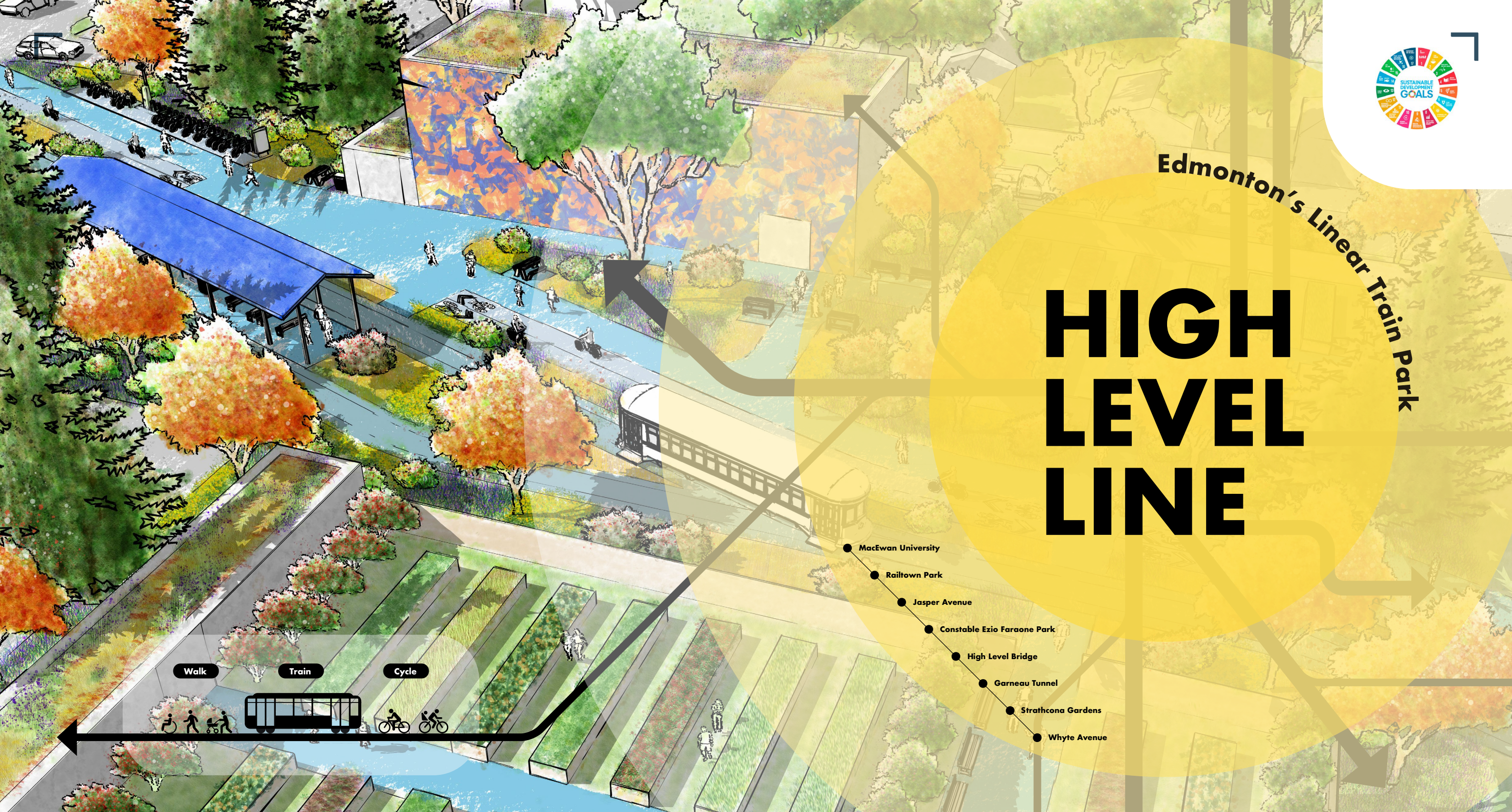




Edmonton's Linear Train Park

# HIGH LEVEL LINE



- MacEwan University
- Railtown Park
- Jasper Avenue
- Constable Ezio Faraone Park
- High Level Bridge
- Garneau Tunnel
- Strathcona Gardens
- Whyte Avenue



Country / City **Canada, Guelph**  
 University / School **University of Guelph**  
 Academic year **2019/2020**  
 Title of the project **High Level Line**  
 Authors **Nathaniel Hannemann**



## TECHNICAL DOSSIER

Title of the project	High Level Line
Authors	Nathaniel Hannemann
Title of the course	Capstone Design Studio
Academic year	2019/2020
Teaching Staff	Prof. Nadia Amoroso, PhD, CSLA, OALA, ASLA and Prof. Sean Kelly, CSLA, OALA, ASLA
Department/Section/Program of belonging	School of Environmental Design and Rural Development
University/School	University of Guelph



### Written statement, short description of the project in English, no more than 250 words

The High Level Line in Edmonton, Alberta, Canada is a pedestrian oriented corridor that incorporates multiple transportation options, new mixed-use and event spaces and contemporary naturalistic planting design. The site connects destinations between downtown and Whyte Avenue with historic street cars, biking infrastructure and pedestrian paths in bold colours. The line re-purposes existing infrastructure and underutilized land to create highly functional spaces for living, working and recreation. The High Line in Manhattan, a sister project, has demonstrated that excellent place-making can be economic, regenerative and a place people want to be. The High Level Line acknowledges, values and incorporates the innumerable benefits of plants and of contemporary naturalistic planting design thereby mitigating some effects of climate change. Increasing urbanization means many people have reduced contact or no contact with natural landscapes and their ecologies. This project incorporates the latter two together and does away with tired 18th-century planting design and its limitations. The inspiration guiding the High Level Line's planting design is three Alberta landscapes: meadows, dry meadows/badlands and agricultural scrub-lands. Planting design in this project has been informed by the work of renowned planting designers — in particular, Piet Oudolf and Noel Kingsbury. The High Level Line is four kilometres in length and included five focus zones — two of these are depicted in this submission.

For further information  
**Máster d'Arquitectura del Paisatge -DUOT - UPC**

T: + 34 93 401 64 11 / +34 93 552 0842  
Contact via email at: [biennial.paisatge@upc.edu](mailto:biennial.paisatge@upc.edu)

**Máster d'Arquitectura del Paisatge -DUOT - UPC**  
ETSAB- Escola Tècnica Superior  
d'Arquitectura de Barcelona  
Avenida Diagonal, 649 piso 5  
08028 Barcelona-S pain



# CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona September 2020  
SCHOOL PRIZE



# CONTEXT

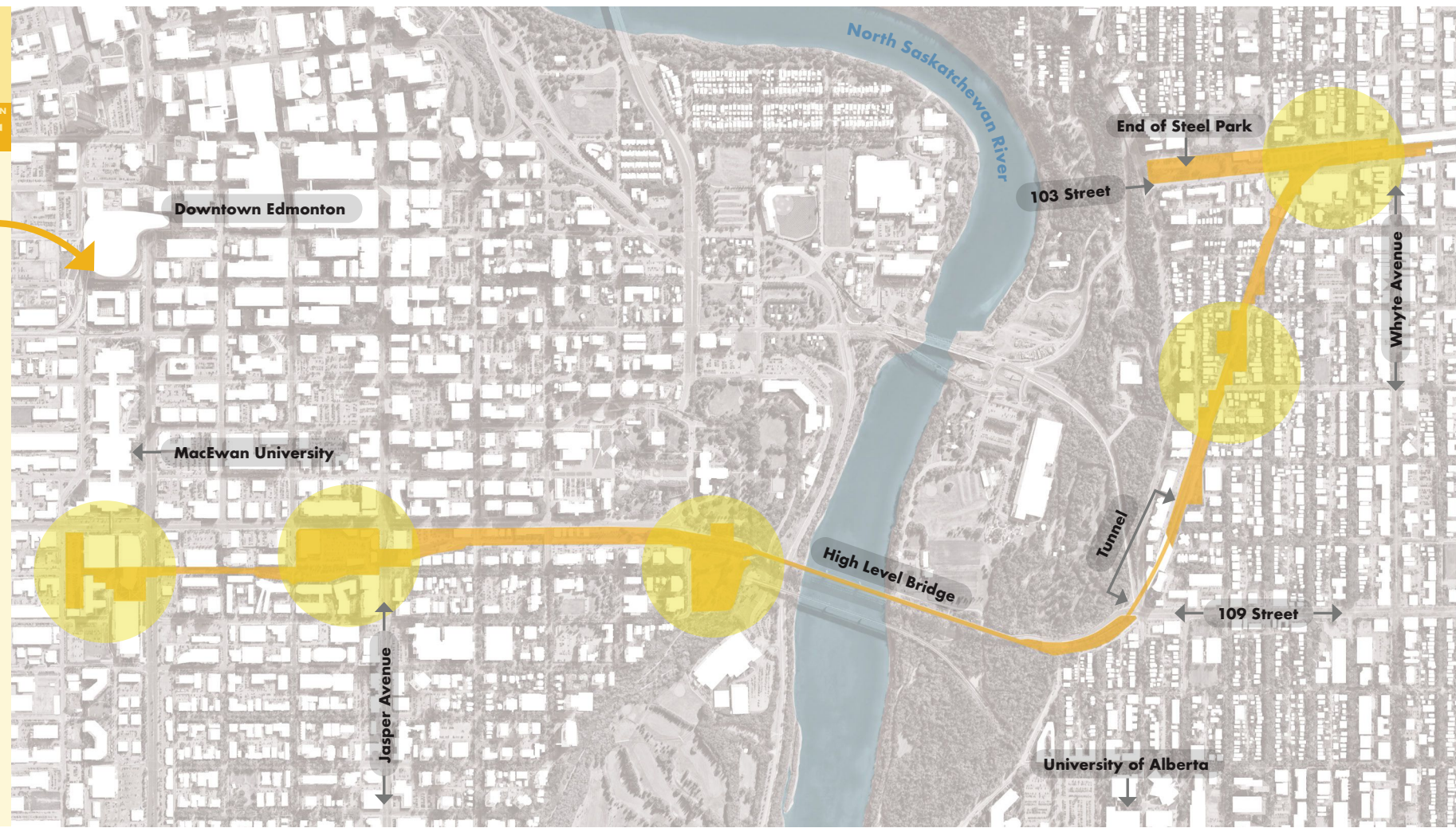
The High Level Line is a four kilometre linear space in central Edmonton comprised of many spaces in six neighbourhoods. The site is primarily comprised of land from the former Canadian Pacific train line which linked the cities of Edmonton and Strathcona. Much of the former train tracks remain and currently historic train cars are operated on the tracks by the Edmonton Radial Railway Society.

The High Level Line begins in the north at MacEwan University and continues southward through Edmonton's western downtown where it crosses the North Saskatchewan River via the top level of the iconic High Level Bridge. On the south side of the river, in Garneau near 109 Street, the site turns eastward and transitions from the High Level Bridge into an underground tunnel for approximately 200 metres. The site then continues straight to the south-east and eventually turns southward and crosses 103 Street by the Old Strathcona Farmers Market. From there the site stretches a few blocks south to Whyte Avenue and also north to End of Steel Park.



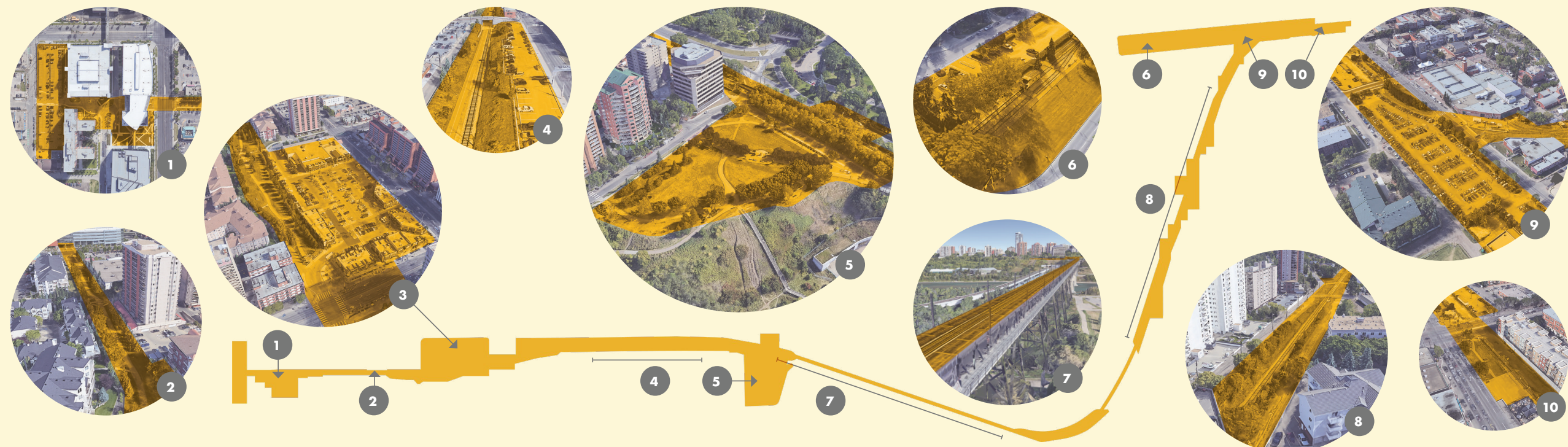
High Level Line site

Five focus locations

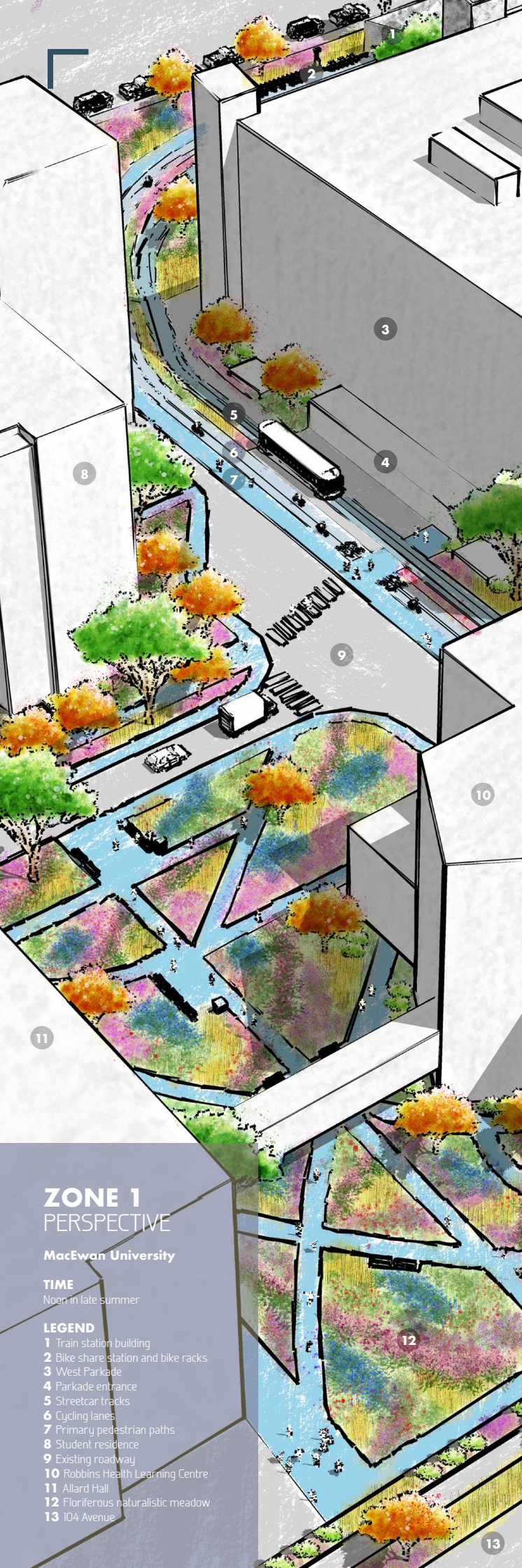


# SITE PHOTOS

- 1 MacEwan University
- 2 Rail Town Park
- 3 Save-on-Foods block
- 4 Grandin corridor
- 5 Constable Ezio Faraone Park
- 6 End of Steel Park
- 7 High Level Bridge
- 8 Strathcona stretch
- 9 Farmers market junction
- 10 Whyte Avenue







## ZONE 1 PERSPECTIVE

MacEwan University

TIME  
Noon in late summer

### LEGEND

- 1 Train station building
- 2 Bike share station and bike racks
- 3 West Parkade
- 4 Parkade entrance
- 5 Streetcar tracks
- 6 Cycling lanes
- 7 Primary pedestrian paths
- 8 Student residence
- 9 Existing roadway
- 10 Robbins Health Learning Centre
- 11 Allard Hall
- 12 Floriferous naturalistic meadow
- 13 104 Avenue

# ZONE 1 | PLANTING DESIGN EXPLODED AXONOMETRIC

## INFORMATION

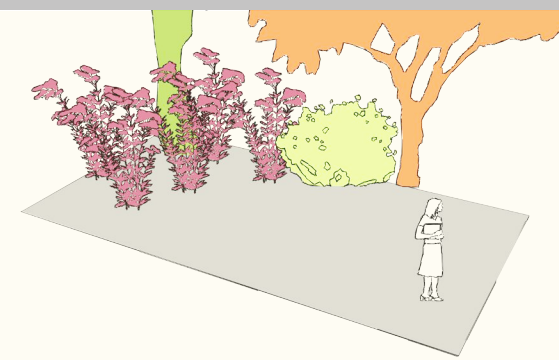
This planting design is naturalistic and includes a significant amount of intermingling between plant types. The plants are not positioned in unnatural ways — there is no symmetry or rows. The plant colours selected are bold but offset to a number of muted colours like beige and green grasses. The planting also includes scatter plants that will establish and move around the site easily like poppies and sunflowers. All these elements combine to simulate the sensation of a meadow.

The exploded axonometric shows the plants' roles. The structural layer is the tallest plants which provide interest outside the flowering season. The theme layer provides waves of colour and the ground cover layer is the most functional layer protecting the soil.

## DESIGN MIX



## STRUCTURAL LAYER



## SEASONAL THEME LAYER



## GROUND COVER LAYER



**Kentucky Coffee Tree**  
*Gymnocladus dioica*



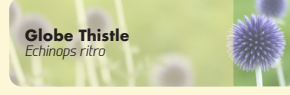
**American Mountain Ash**  
*Sorbus americana*



**Red-osier Dogwood**  
*Cornus sericea*



**Spotted Joe-pye Weed**  
*Eupatorium maculatum*



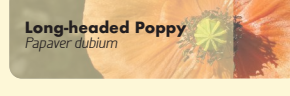
**Globe Thistle**  
*Echinops ritro*



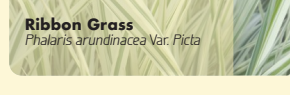
**Canary Reed Grass**  
*Calamagrostis acutiflora*  
"Karl Foerster"



**Sensation Deep Rose Meadow Sage**  
*Salvia nemorosa*  
"Sensation Deep Rose"



**Long-headed Poppy**  
*Papaver dubium*



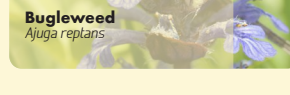
**Ribbon Grass**  
*Phalaris arundinacea* Var. *Picta*



**Pink Pewter Lamium**  
*Lamium maculatum*  
"Pink Pewter"



**Woodland Strawberry**  
*Fragaria vesca*



**Bugleweed**  
*Ajuga reptans*



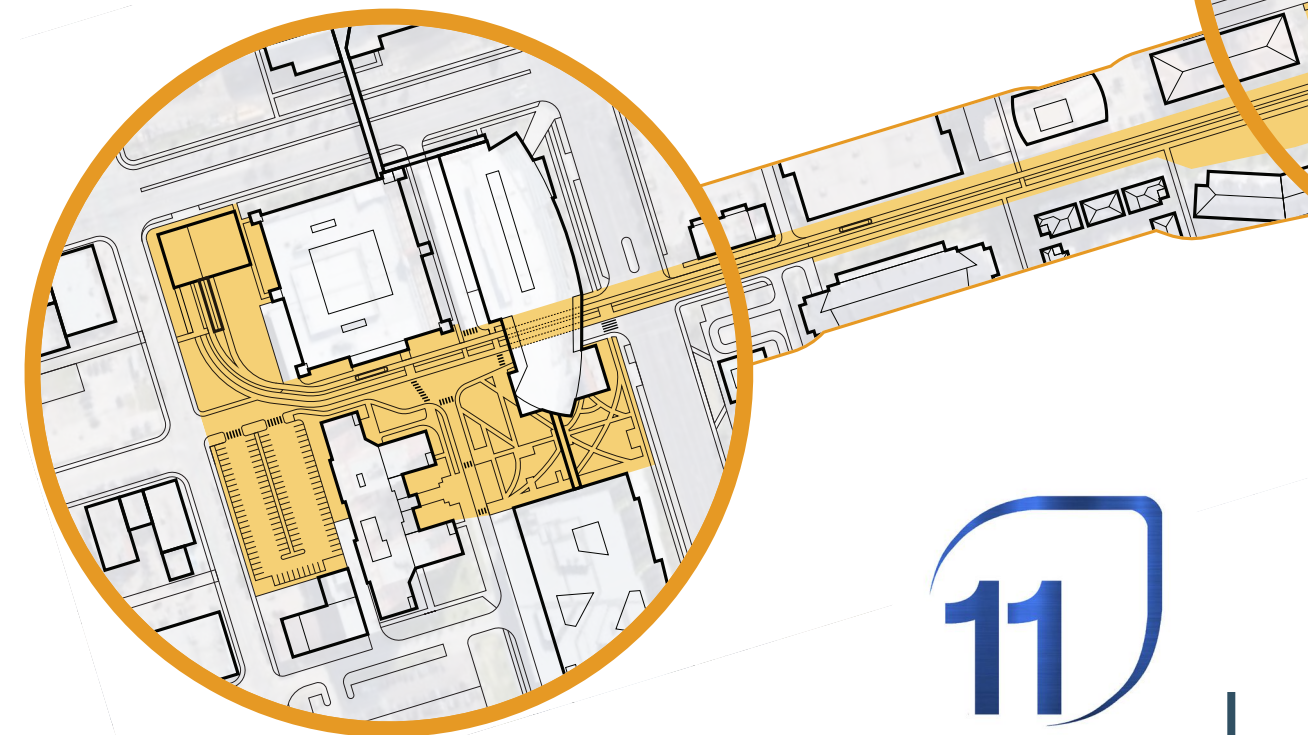
A contemporary planting design by Piet Oudolf at the Lurie Garden in Chicago.



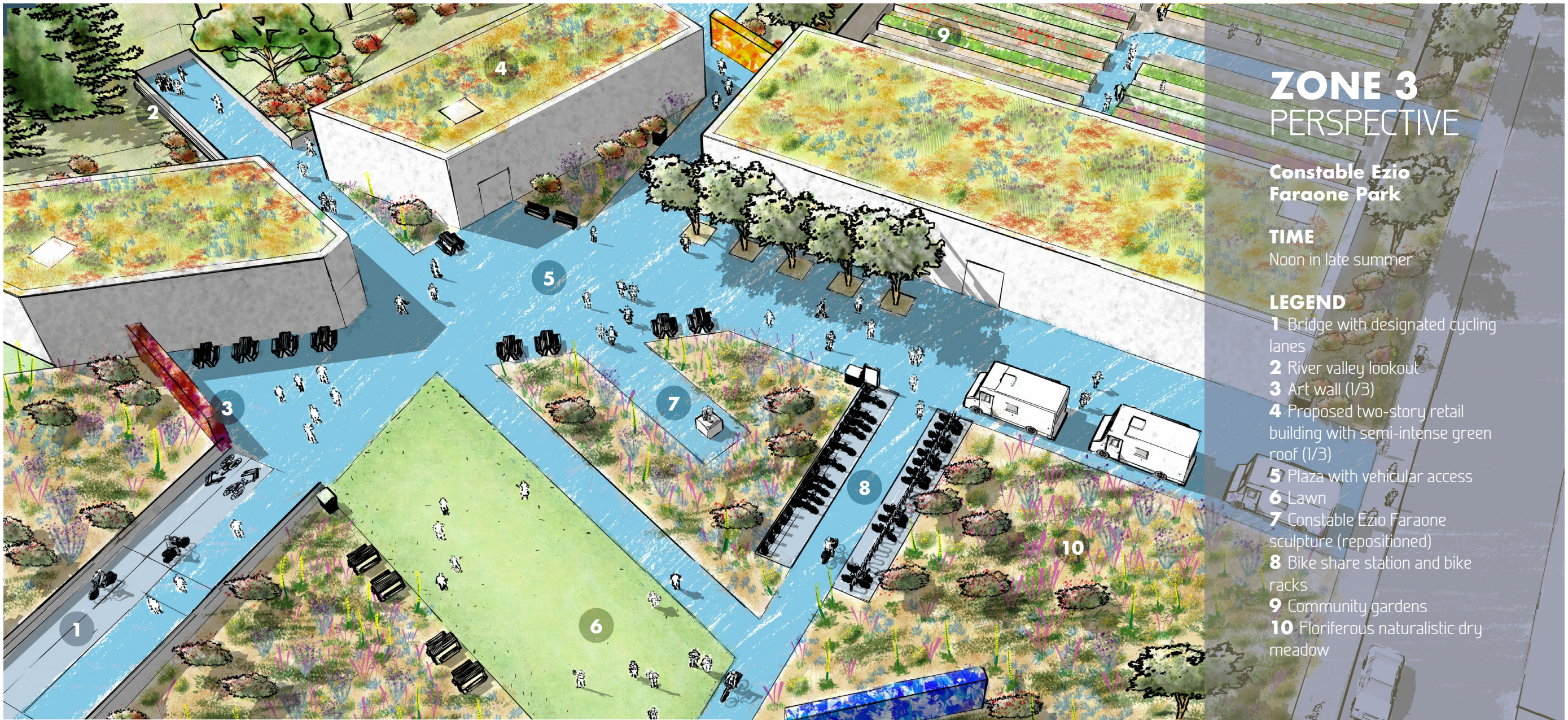
# CONTEMPORARY NATURALISTIC PLANTING DESIGN

Contemporary naturalistic planting design is an art form and technology with many benefits over conventional planting design. Traditional planting design focuses on the precise placement and repetitive high maintenance of individual plants. Contemporary planting design differs by focusing on the creation and management of resilient plant communities by including characteristics from wild plant communities. This style uses high density plantings with intermingling both vertically and horizontally among species. The results are dynamic and interesting plantings which invoke the sensation of nature and can be accompanied by a strong

and unique sense of place. Additional benefits include lower inputs such as water and a significant reduction in the infiltration and establishment of weeds. Most of these plantings in the northern hemisphere require only annual cutting to remove dead plant material and minor replacement or removals. Limitations of contemporary planting design are the lack of knowledge required for its design and upkeep, as well as the challenge new design presents to culturally entrenched aesthetics and expectations.







# ZONE 3 PERSPECTIVE

**Constable Ezio  
Faraone Park**

**TIME**  
Noon in late summer

- LEGEND**
- 1 Bridge with designated cycling lanes
  - 2 River valley lookout
  - 3 Art wall (1/3)
  - 4 Proposed two-story retail building with semi-intense green roof (1/3)
  - 5 Plaza with vehicular access
  - 6 Lawn
  - 7 Constable Ezio Faraone sculpture (repositioned)
  - 8 Bike share station and bike racks
  - 9 Community gardens
  - 10 Floriferous naturalistic dry meadow

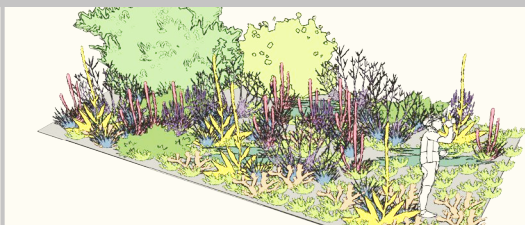
## ZONE 3 | PLANTING DESIGN EXPLODED AXONOMETRIC

### INFORMATION

This planting is inspired by plant communities in dry areas. This is represented in the plant selection, the spacing between plants, as well as a gradation of plant heights across the site – trees transition into shrubs and then into herbaceous plants.

The exploded axonometric shows the plants' roles. The structural layer is the tallest plants which provide interest outside the flowering season. The theme layer provides waves of colour and the ground cover layer is the most functional layer protecting the soil.

### DESIGN MIX



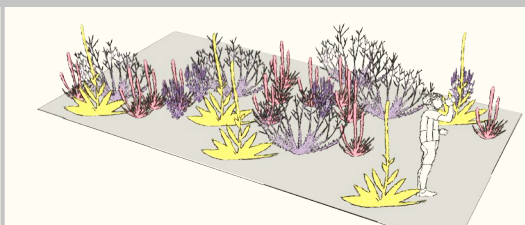
**Russian Sage**  
*Perovskia atriplicifolia*

**Giant Silver Mullein**  
*Verbascum thapsus*

**Dense Blazing Star**  
*Liatris spicata*

**May Night Wood Sage**  
*Salvia sylvestris*

### SEASONAL THEME LAYER



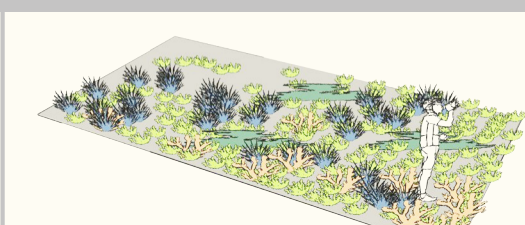
**Horizontal Juniper**  
*Juniperus horizontalis*

**Blue Oat Grass**  
*Panicum polyanthemum*

**Prickly Pear**  
*Opuntia polyacantha*

**Angelica Stonecrop**  
*Sedum reflexum*

### GROUND COVER LAYER



**Russian Olive**  
*Elaeagnus angustifolia*

**Buffalo Berry**  
*Shepherdia argentea*

**Red Osier Dogwood**  
*Cornus sericea*

**Shrubby Cinquefoil**  
*Dasiphora fruticosa*

### STRUCTURAL LAYER

