

# The design studio as experiment:

*the speculation of urban futures*

Graduate Landscape Architecture Program

College of Architecture and Environmental Design

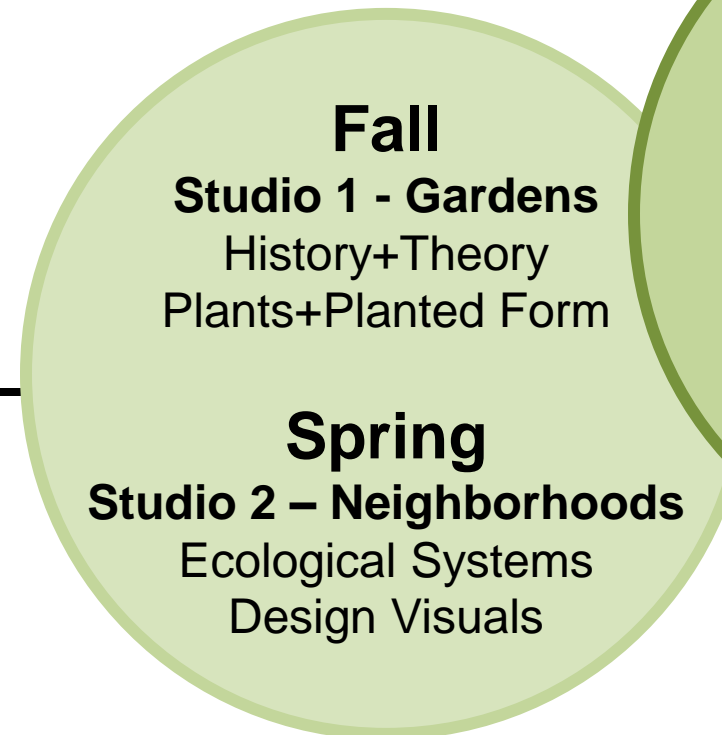
Kent State University

## Morphologies:

To explore the **various scales** and responsibilities of landscape architecture and articulate critical elements of **infrastructures, systems, and urban forms.**

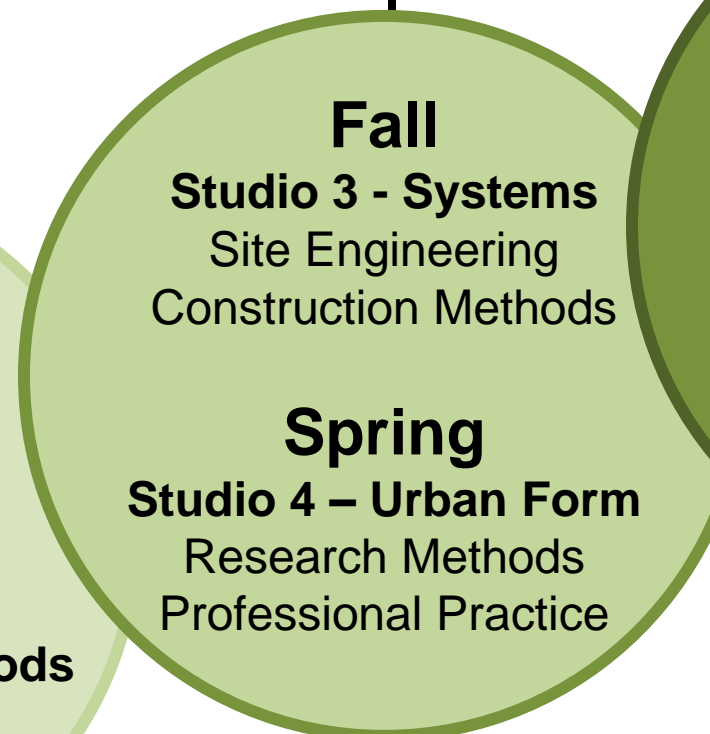
## Groundwork:

To introduce **base knowledge** of landscape architecture and create a foundation for design and **professional awareness**



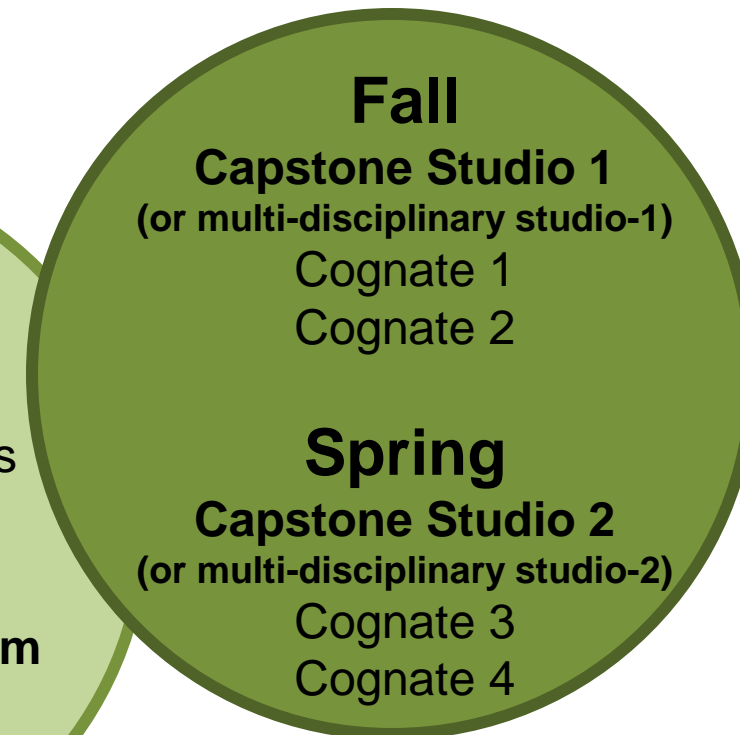
**Year 1**

*groundwork*



**Year 2**

*morphologies*



**Year 3**

*experimentation*

**Experimentation:** Inquiry into an approach that **integrates** design elements, theory, history, technical knowledge, and life experiences into a **comprehensive design strategy**



Cleveland Campus



# Fragmentation

## Neighborhoods and Habitats

Cleveland, Ohio



W.25th Rapid Stop  
Ohio City



The Red Line Greenway  
Ohio City



The Velvet Tango Room  
Duck Island



Scranton Habitat Restoration  
Cuyahoga River



The Fairmont Creamery  
Tremont



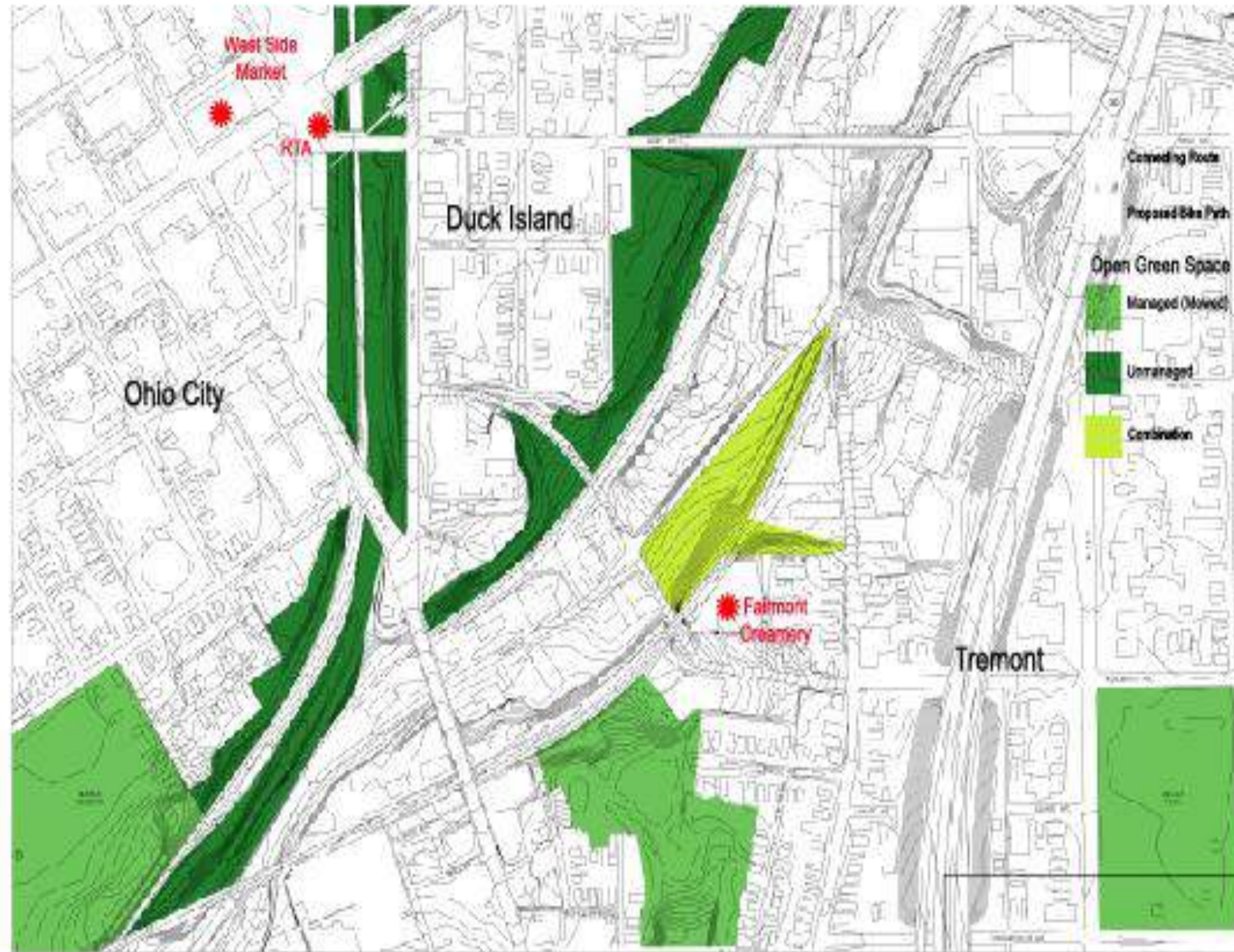
West Side Market  
Ohio City



Great Lakes Brewing Company  
Ohio City



Monroe Street Cemetery  
Ohio City



St. Theodosius  
Tremont



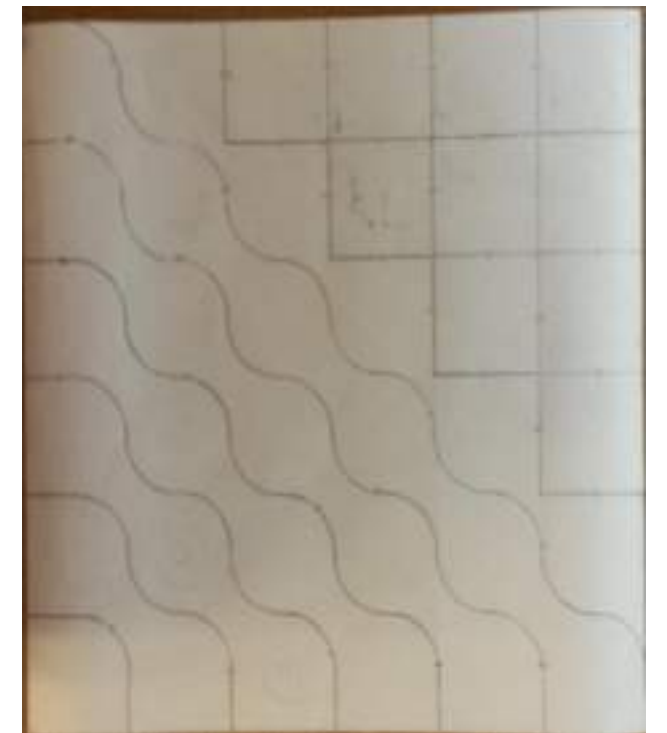
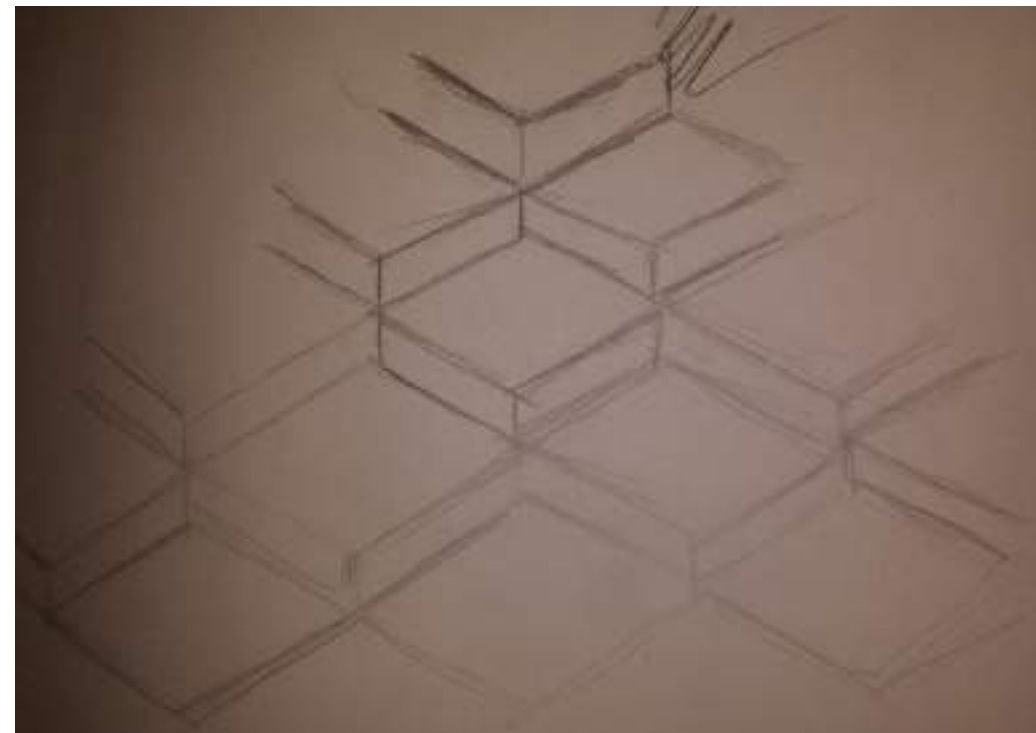
Lincoln Park  
Tremont



Tremont TapHouse  
Tremont

Studio 1/Walworth Run - context





Studio 1/Walworth Run – sketches and concept iterations





Studio 1/Walworth Run – concept development





Studio 2/Warren Vacancy – a community fragmented



# Ecological Streetscapes

Replicable Strategies for Vacancy in the Garden District, Warren, Ohio



The Garden District is a neighborhood in close proximity to downtown Warren, Ohio. The housing stock consists of early 20th century structures whose construction coincided with the industrial success of the town. As the manufacturing industries continue to diminish, economic forces have driven community members elsewhere in search of opportunity. This trend has worsened with the increase of urban sprawl and the aging of existing infrastructure.

Vacancy is at an all-time high, with more soon to follow. As homes are foreclosed upon, many of them result in abandoned structures, causing dangerous conditions to the surrounding community. Trumbull Neighborhood Partnership has been working to stabilize these communities through incentive programs and, if necessary, demolition of uninhabitable homes. These demolitions typically result in lawn monocultures that require regular maintenance.

These non-productive landscapes are a burden socially, ecologically and economically. The cost of maintaining these empty lots has fallen largely on the city and ultimately the taxpayers. The culmination of these issues, along with dependency on chemicals and mowing has called attention to the need for a more efficient and beautiful means to manage the issues of vacancy.



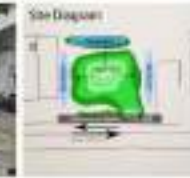
Neighborhood Context



Vacancy Mapping of the Garden District

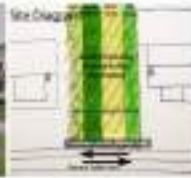
## Experimental Ecology

The presence of trees in this area provides the opportunity to incorporate ecological improvements in experimental ways, particularly in the possibility of aggregating vacant lots to become more available. The revitalization process includes land art and hydrological measures to improve the vacant lot.



## Solidify Streetscapes

This zone has a higher concentration of houses. The revitalization of this lot uses the foundation stone on site from demolished houses to solidify the street edge. A cover crop is used and mowed regularly to reduce nutrient levels in the soil.



Opportunity Areas in the Garden District



Located adjacent to the existing Western Reserve towaway, this developed rail corridor is critical to improving circulation patterns in the Garden District. This proposal uses materials and seasonal interest to make this a year round draw. While access is improved, neighboring properties benefit from ecological buffering and neighborhood walkable activity.



## Fill the Grill

Once contiguous neighborhoods are now left riddled with vacancy, resulting in gap-tooth streetscapes. Maintaining the historical edge of a streetscape allows for physical and psychological comfort for pedestrians, while contributing to the overall rhythm of the street. Filling the gaps at the street edge maintains the traditional urban fabric while allowing ecology to decrease the burdens of maintenance. The following examples are possible methods that can be used to "fill the grill".



## Hello Old Neighbors

As our neighborhoods change due to post-vacancy solutions, the resultant landscapes allow us to reimagine our relationships with the natural systems that shape our world. Embracing these relationships help us to reconsider the communities that contribute to healthy neighborhoods. This proposal aims to welcome back the plants, birds and animals that once dominated the neighborhood landscape. The following examples are possible methods that can be implemented to welcome our old neighbors back into the community.



## Community Space

This open lot in the center of the Garden District, playing an important communal role, is being reimagined as a public and private space. This corner lot now serves neighbors to experience history, reconnected to the streetscape through pedestrian gardens.



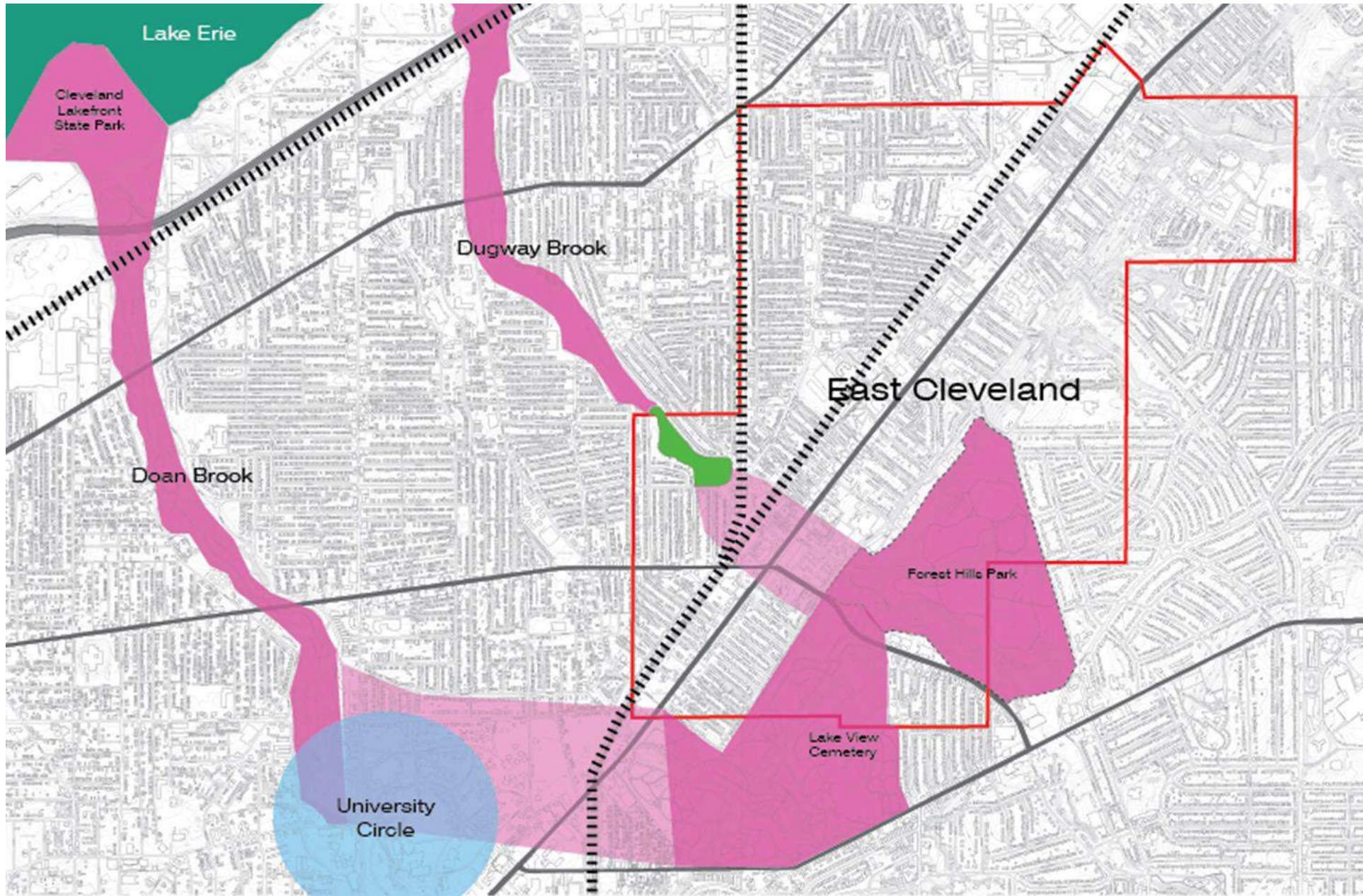
## Proximity Priority Zone

Located along walking distance of downtown, this zone plays a pivotal role in connecting the neighborhood to Warren's greater assets: the downtown district and the Mallway Base. The revitalization of this lot is enhanced using traditional fencing and bio-retention.



Studio 2/Warren Vacancy – a community reconnecting





Studio 2/Pattison Park– current conditions





# EAST CLEVELAND PATTISON PARK

REBECCAH D. BRAWLEY  
 KENT STATE UNIVERSITY  
 COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN  
 MASTERS OF LANDSCAPE ARCHITECTURE  
 MAY 09, 2015



## EXISTING SITE

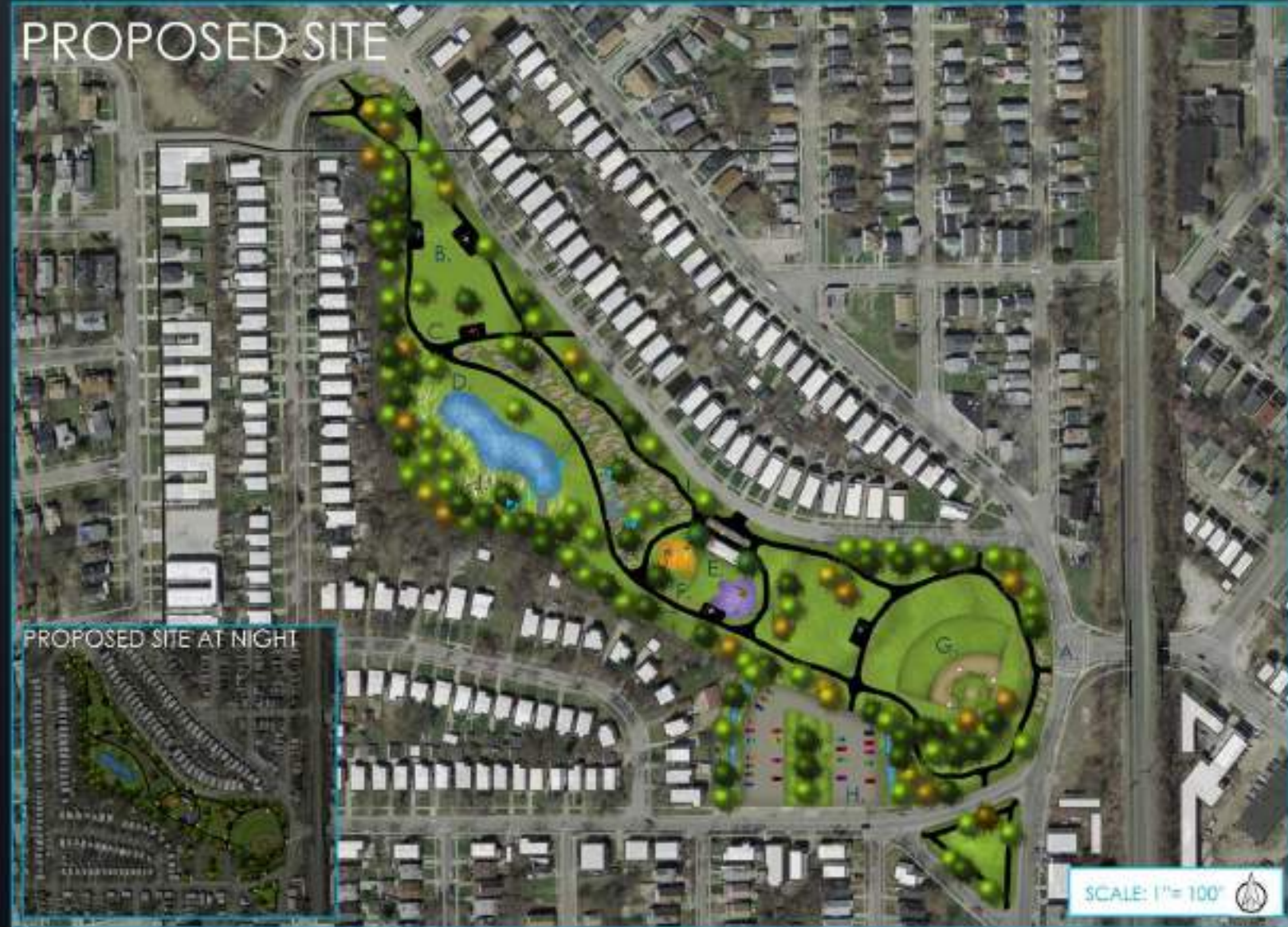


PATTISON PARK IS A STAPLE THAT PROVIDES INTERACTION AND A SENSE OF PLACE WITHIN THE NEIGHBORING COMMUNITIES, WITH PATTISON PARK BEING IN BOTH EAST CLEVELAND AND CLEVELAND. THIS GIVES THE PARK THE UNIQUE ABILITY TO CONNECT THE TWO CITIES. THE NEW PROPOSAL FOR PATTISON PARK EMPHASIZES CONNECTIVITY THROUGH CONTINUOUS PHYSICAL INTERACTION (E.G. THE JOGGING PATH AND OUTDOOR EXERCISE STATIONS) AS WELL AS VISUAL CUES THROUGHOUT THE PARK (E.G. TREE CANOPY OPENINGS, SCENIC POND, NATIVE WILD FLOWER PRESERVE, AND SUCCESSIONAL WILD GRASSES). THESE CONNECTIONS NOT ONLY CONNECT THE COMMUNITY WITH THE PARK BUT IT ALSO CONNECTS THE COMMUNITY WITH THE AREAS NATURAL ECOSYSTEM.

## LEGEND

- A. ENTRANCE SIGNS
- B. OUTDOOR GYM
- C. JOGGING PATH
- D. SCENIC POND
- E. RESTROOM FACILITIES
- F. PLAYGROUND
- G. BASEBALL FIELD
- H. CONSOLIDATED PARKING
- I. NATIVE WILDFLOWER PRESERVE
- J. SUCCESSIONAL WILD GRASSES

## PROPOSED SITE



### PROPOSED SITE AT NIGHT



SCALE: 1"= 100'

Studio 2/Pattison Park– concept proposal





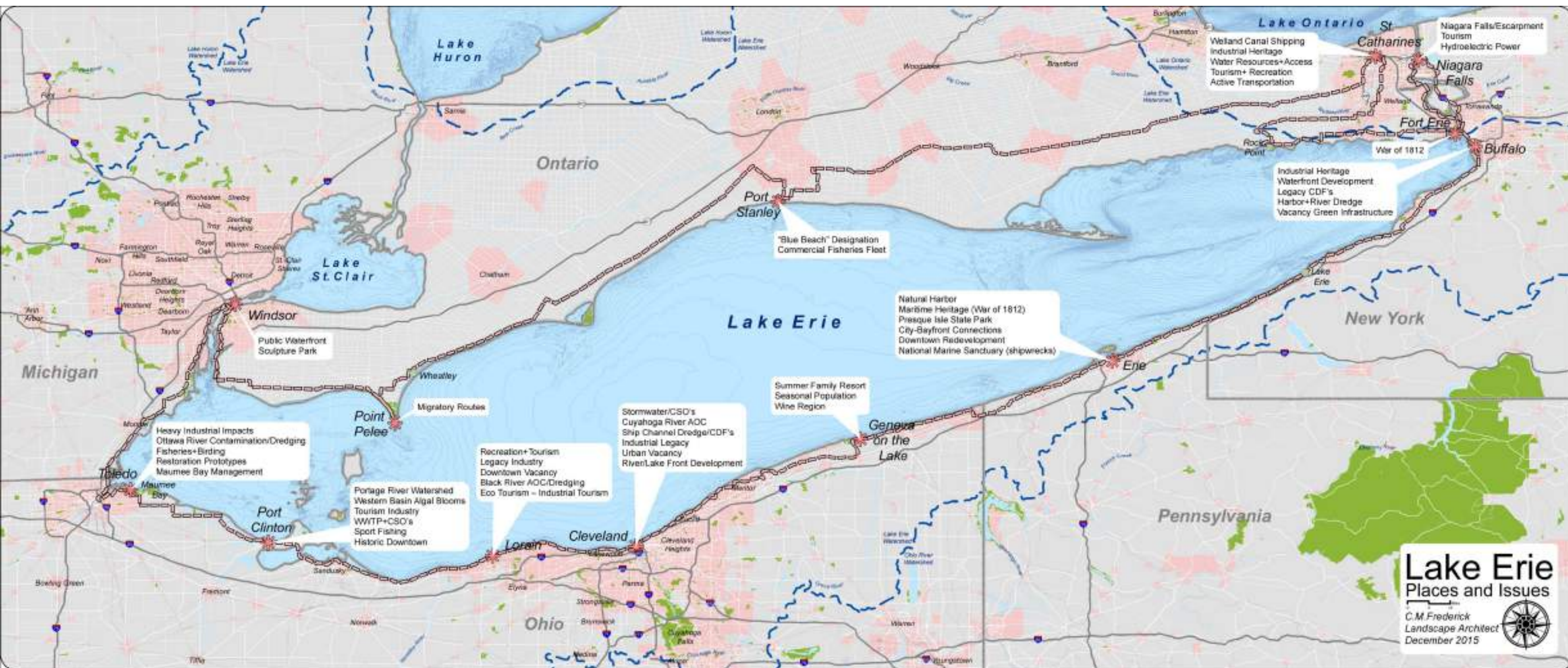
Studio 2/Pattison Park— a community comes together





Studio 2/Pattison Park– the past is the future





Studio 3/Systems+Infrastructure – Lake Erie/Cuyahoga Watershed



Port  
Clinton



St.  
Catherines



Camping



Buffalo



Niagara



Erie





## Studio as experiment

Noun: a test, trial, or tentative procedure; an act or operation for the purpose of **discovering something unknown** or of **testing a principle**, supposition, etc.

Verb: to try or test, especially in order **to discover** or **prove something**



Beginning of semester— hope springs eternal



## Places/stakeholders

- **Not** in a lab or a **controlled environment** but the **real** (and most times) **messy world**
- Real places – real people – real issues, yet it can still result in the **fantastic**

## Rules of engagement

- Client must understand that this is a studio and the studio is an **experiment** (*sometimes a contract might be needed*)
- Students must **realize the issues** of the client/place/program/context
- Client – students – professor must collaborate on the **pragmatic teaching objectives** as well as the **serendipity of design process** (sometimes it is purposeful and sometimes it just feels good)
- Client should be at a **different place** at the conclusion of the project



# Studio 3 intent

- Water as system and framework for design with technical requirements – yet it is also magical (*and the reason for life on the planet*)

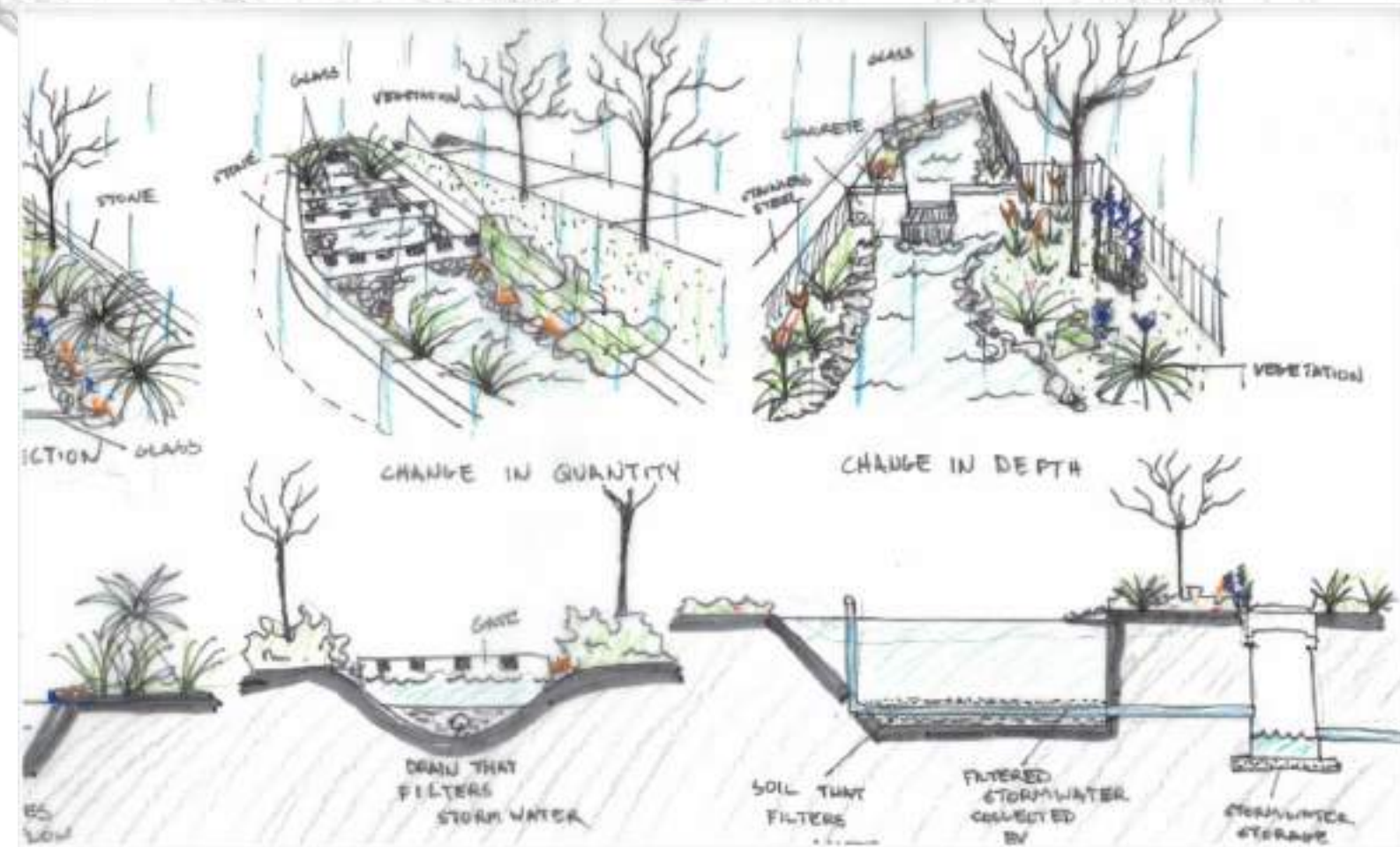
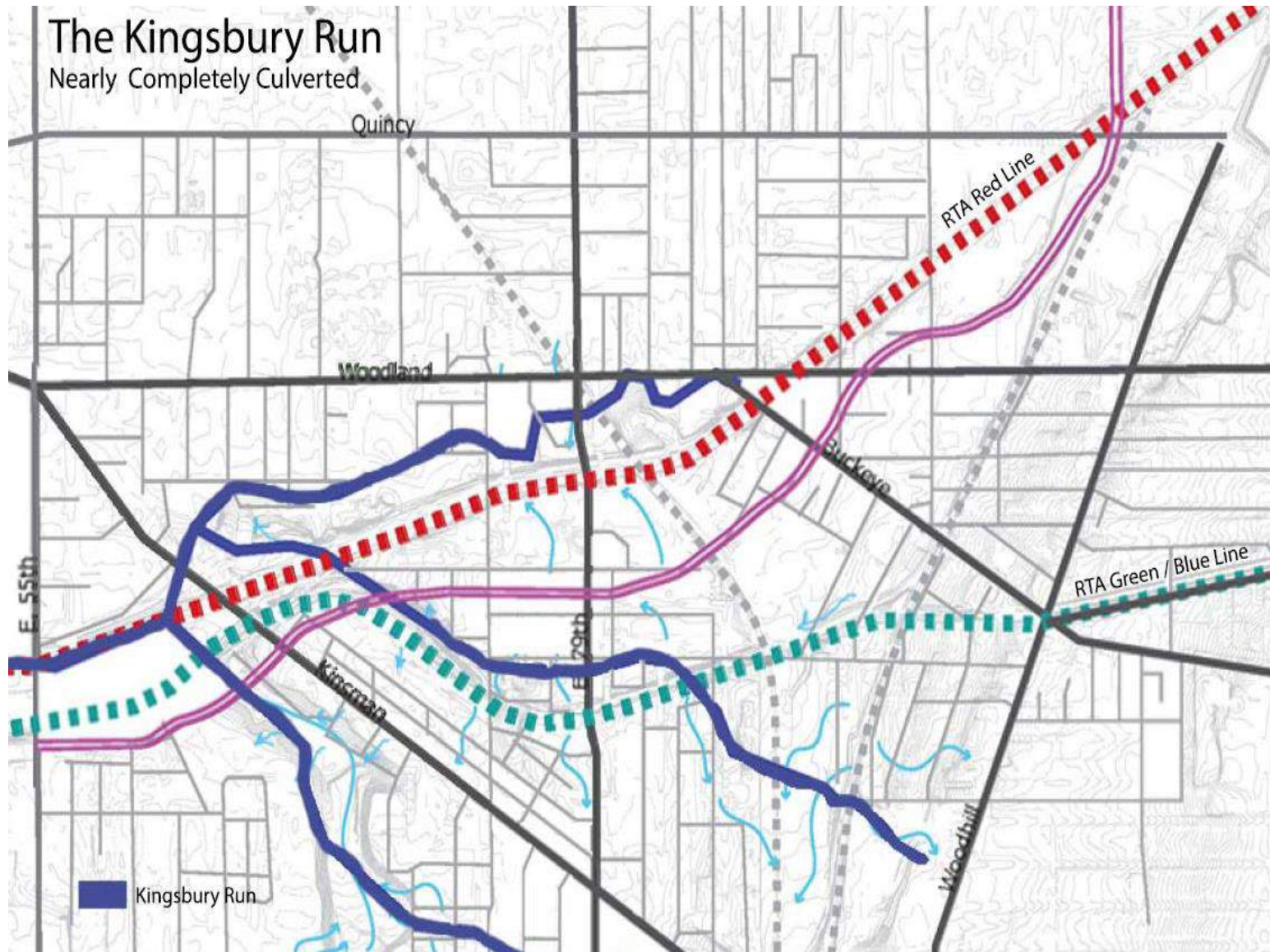
***If there is magic on this planet,  
it is contained in water.***

*Loren Eisely, The immense Journey, 1957*

## Technical Requirements

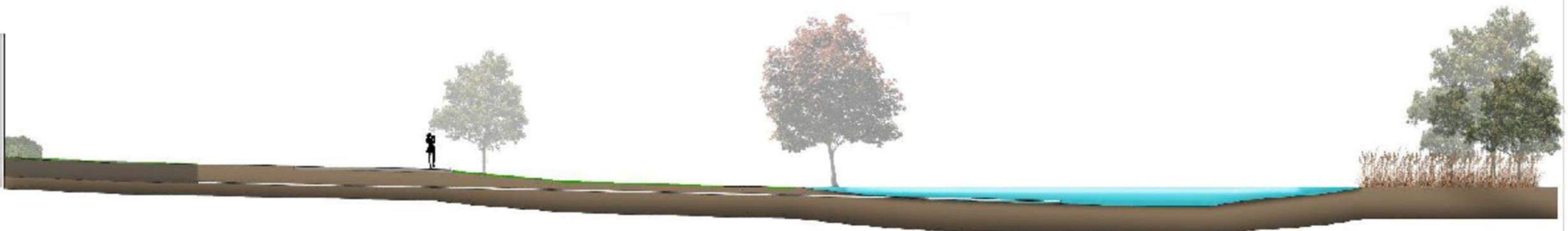
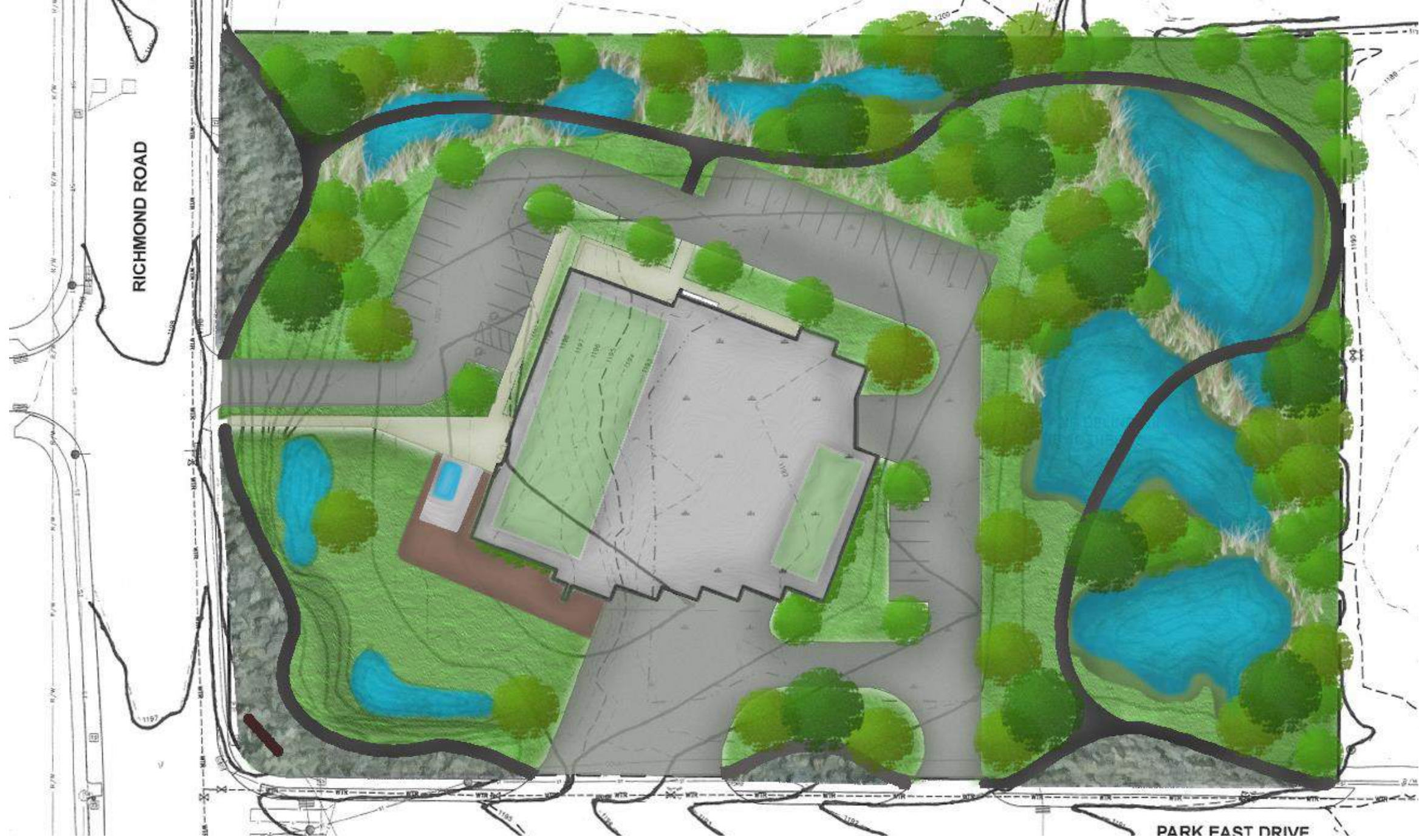
- Watershed delineation
- Land-cover mapping
- Plant community assessment
- Soils mapping
- Topography analysis
- Pre-development Q calculation
- Site grading
- Planting design
- Post-development Q calculation
- BMP/GI case studies





Studio 3/Kingsbury Run – “Restoration Corridor”

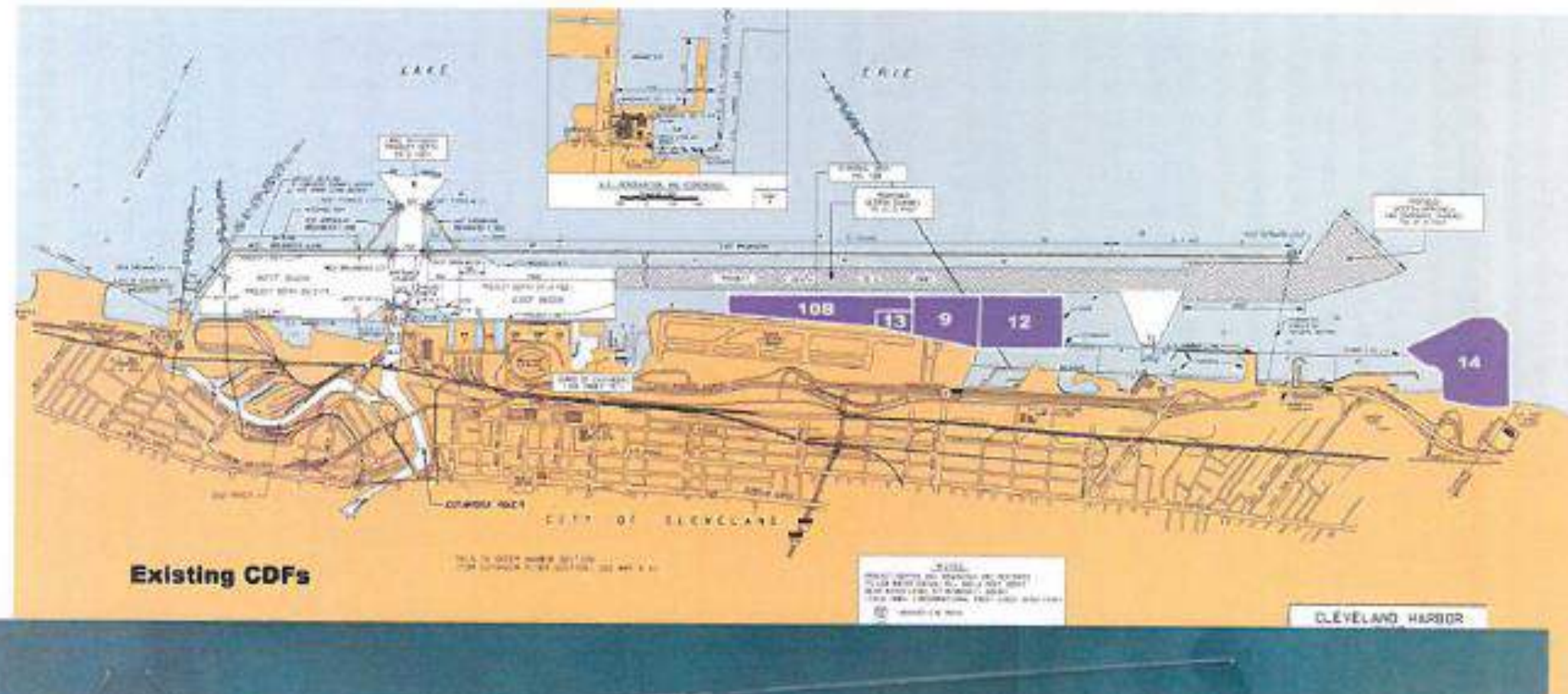




Studio 3/Beachwood Fire Station – the movement of water to organize a site

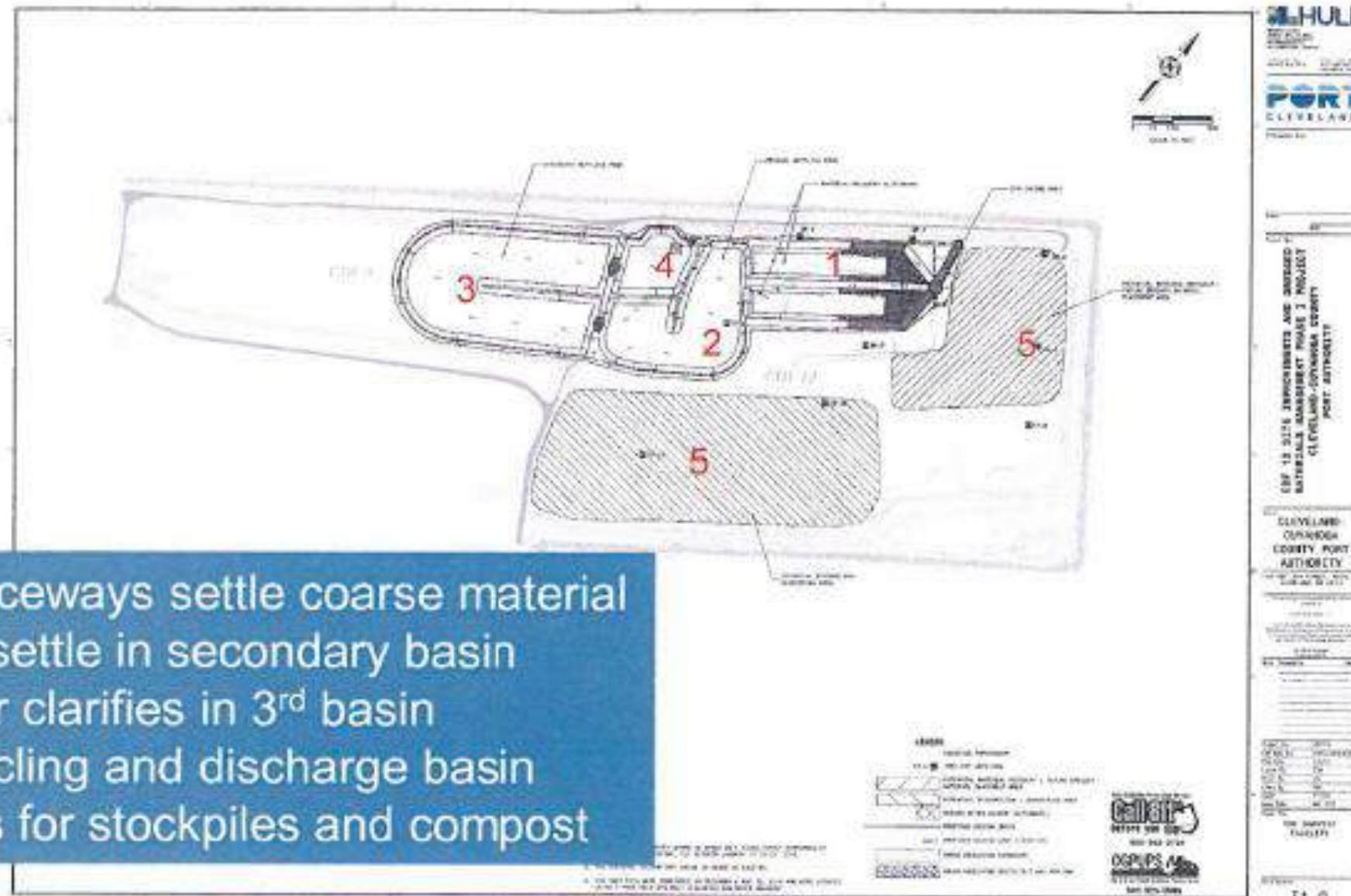


# Cleveland CDFs





## Sediment Processing Center on CDF 12



1. 2 sluiceways settle coarse material
2. Silts settle in secondary basin
3. Water clarifies in 3<sup>rd</sup> basin
4. Recycling and discharge basin
5. Areas for stockpiles and compost





November 2015 – existing conditions



# VOLUME STUDY: AMOUNT OF SEDIMENT EVERY 5 YEARS (BROWNS STADIUM 281,393 CUBIC YARDS)

5 YEARS: 875,000 CUBIC  
YARDS (3.1 TIMES)



10 YEARS: 1.75 MILLION CUBIC  
YARDS (6.2 TIMES)



20 YEARS: 3.5 MILLION CUBIC  
YARDS (12.4 TIMES)



30 YEARS: 5.25 MILLION CUBIC  
YARDS (18.6 TIMES)

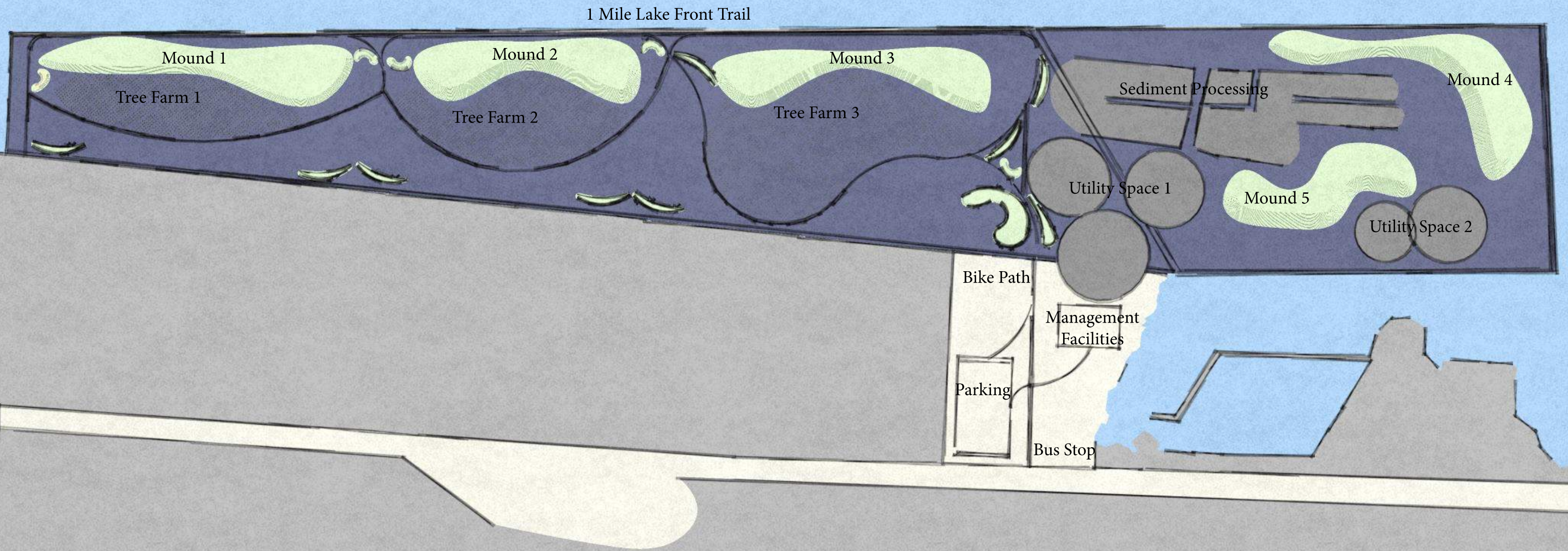


40 YEARS: 7 MILLION CUBIC  
YARDS (25 TIMES)



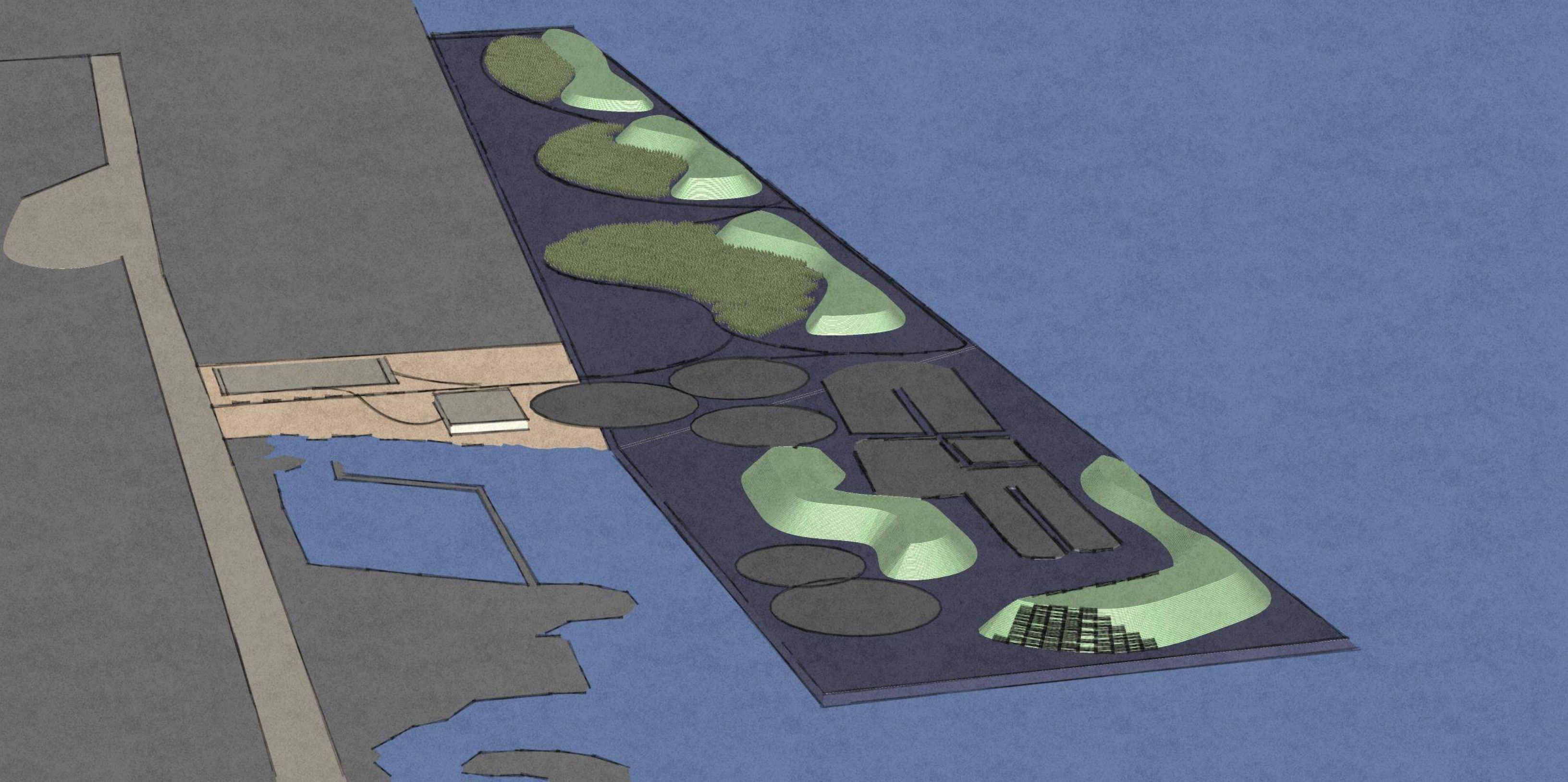
40 year lifespan – 250,000 CY/yr – 60 to 80, 000 CY to harvest





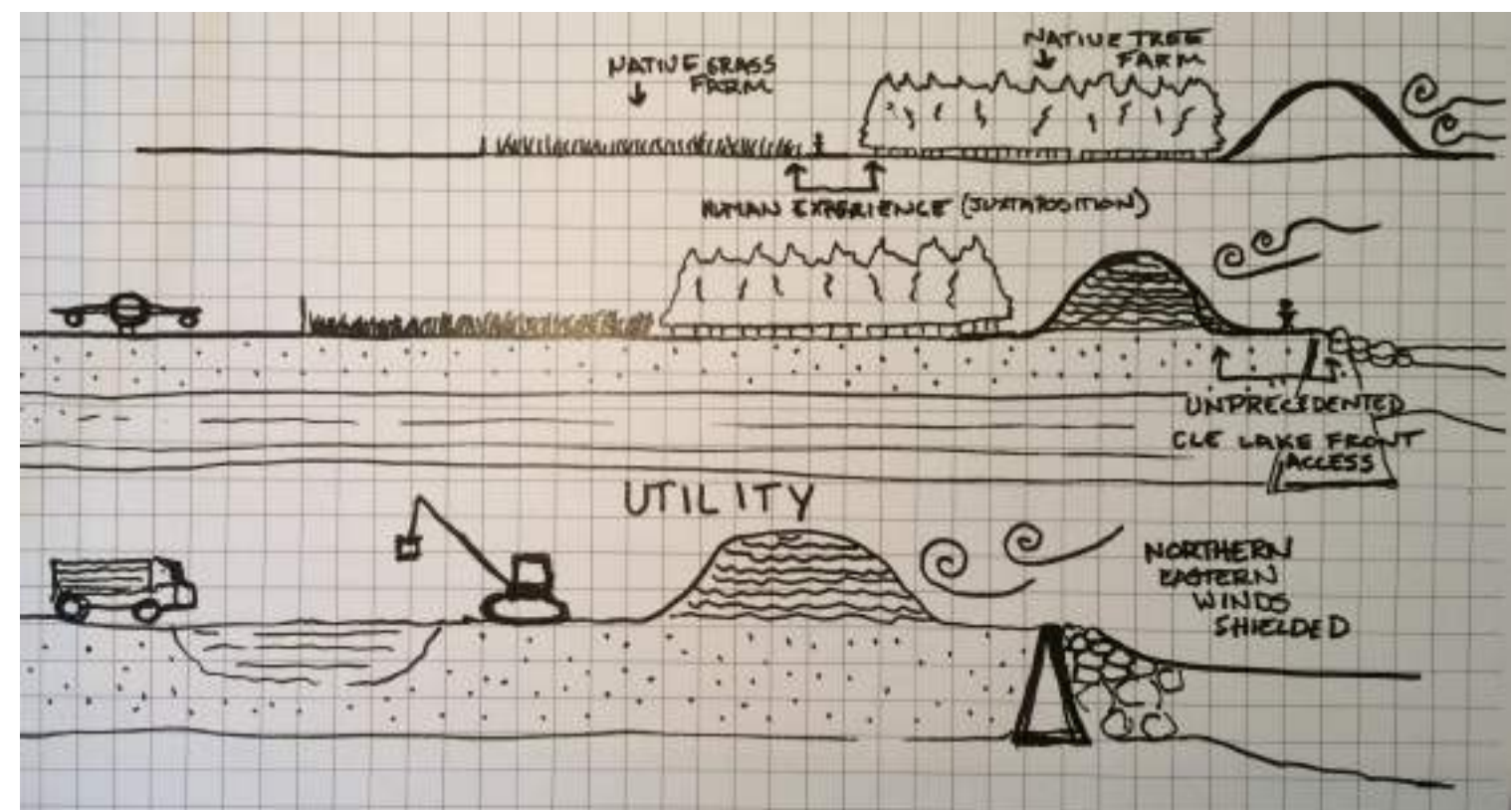
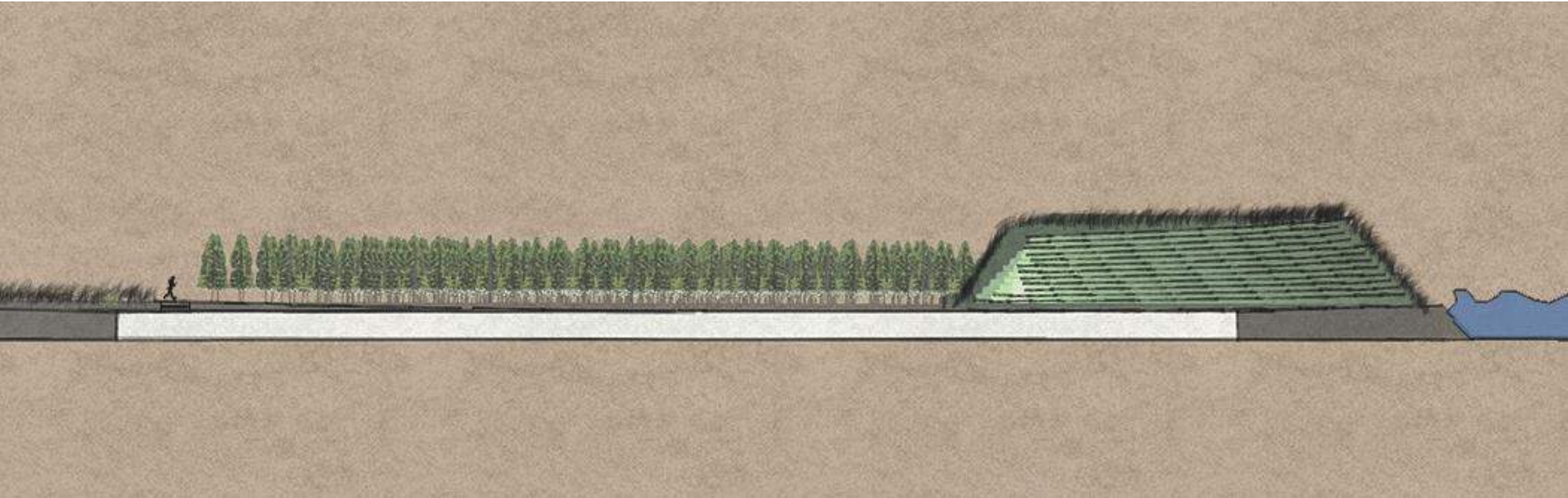
Lake Erie Sand Dunes





Dunes as protection for tree farm/future park vegetation





Section of tree farm and dunes/process diagram

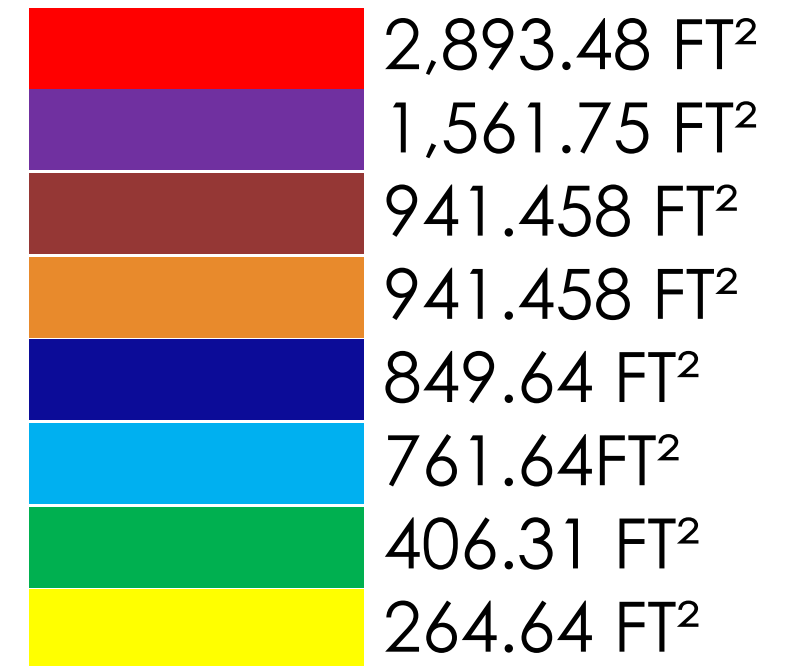
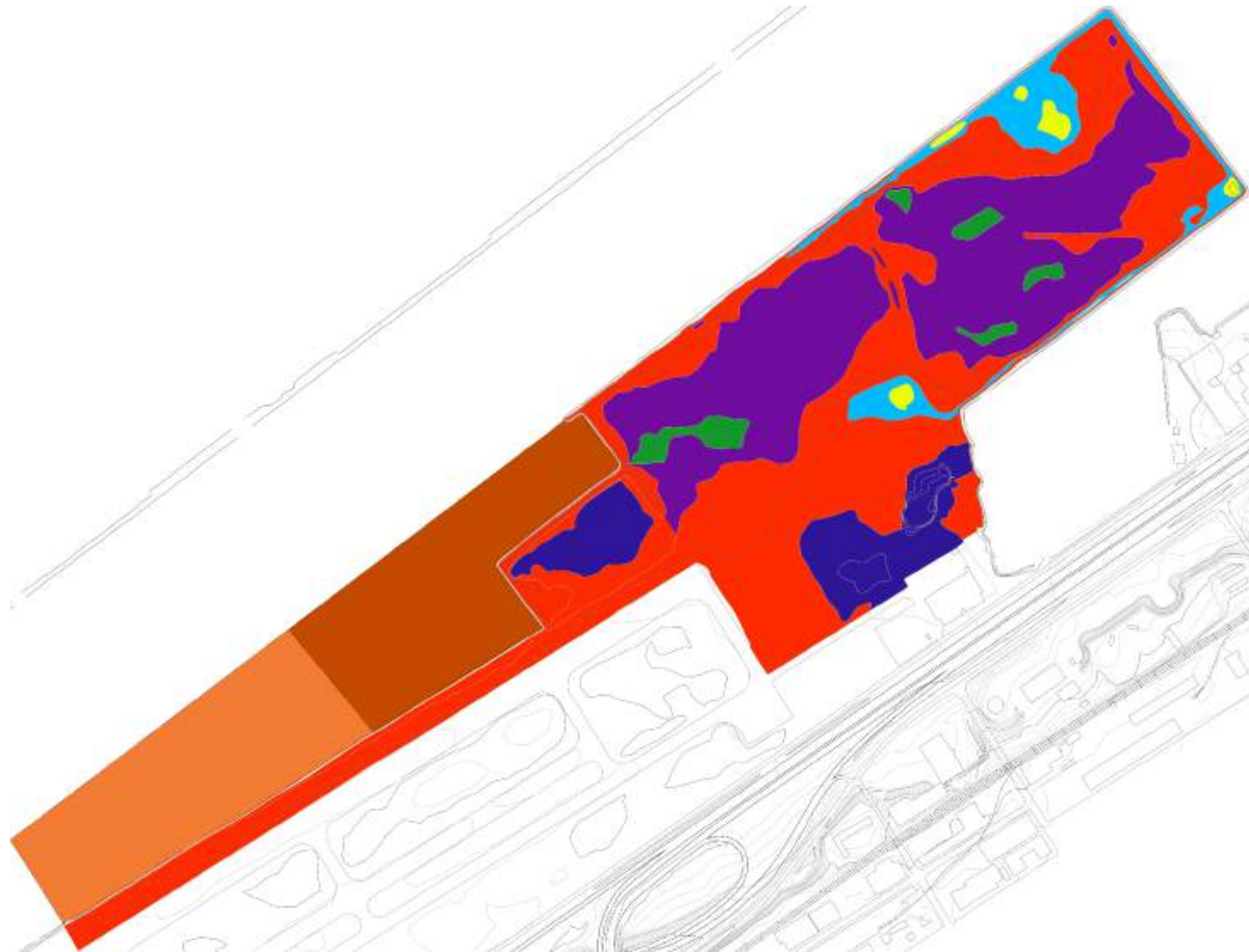




Sediment layering— open space as ecological levels



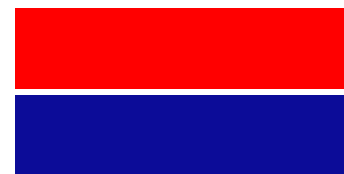
# SURFACE AREA / ECOREGION



INTERIOR PLATEAU



ERIE DRIFT PLAINS



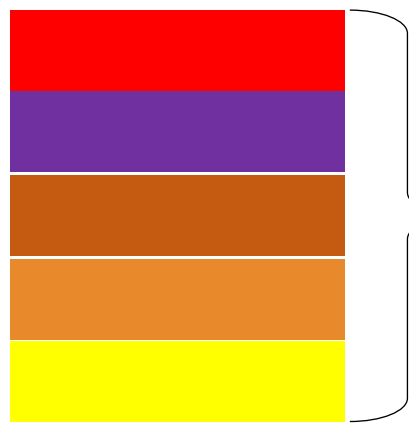
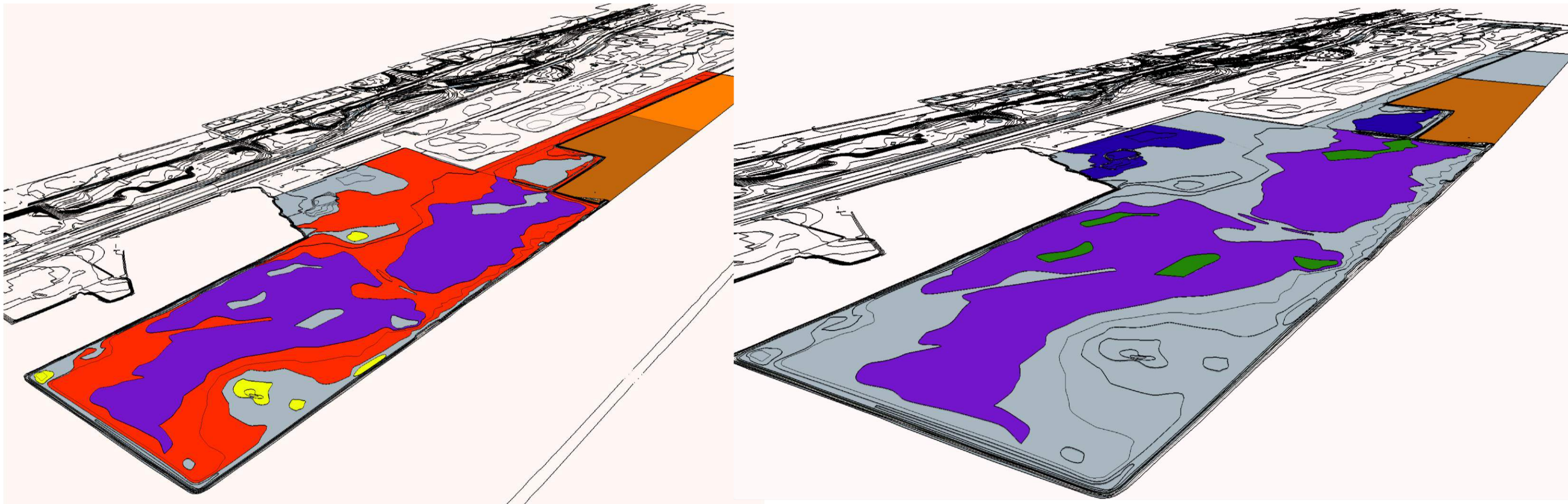
HURON/ERIE LAKE PLAIN



FORMAL PARK

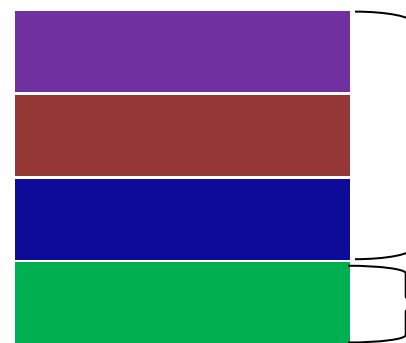






RAISED 6.3 FEET

\*15 YEARS OF DREDGED SEDIMENT = 70,857,000 FT<sup>3</sup>



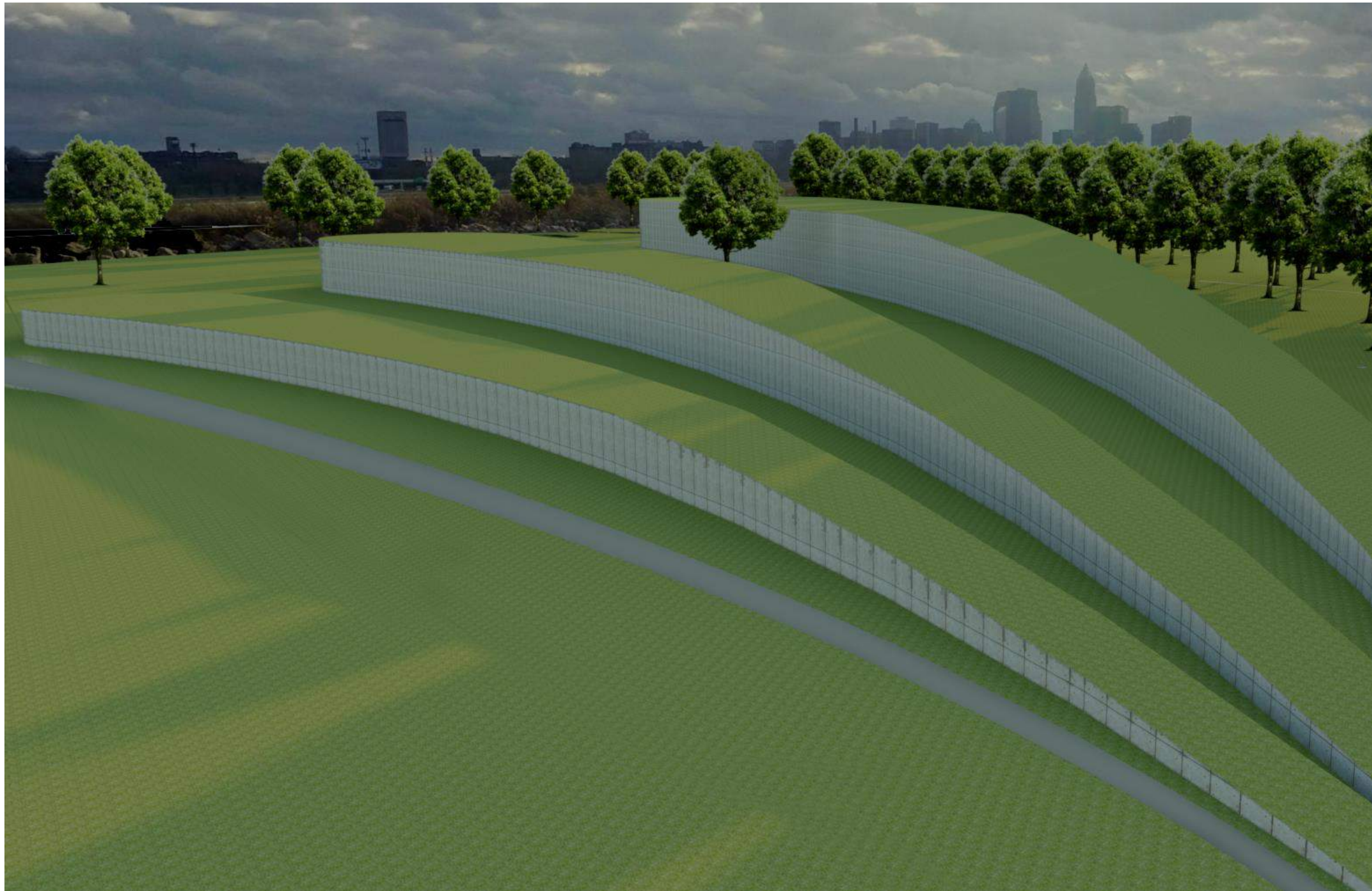
RAISED 15 FEET

RAISED 30 FEET

\*30 YEARS OF DREDGED SEDIMENT = 141,750,000 FT<sup>3</sup>

## Ecological phasing management





Terrace structures



# INTERIOR PLATEAU PRAIRIE



Bitternut Hickory *Carya cordiformis*



Bluestem Grass *Andropogon gerardi*



Rattlesnake Master *Eryngium yuccifolium*



# ERIE DRIFT PLAINS FOREST



American Beech *Fagus grandifolia*



Red Maple *Acer rubrum*



Black Birch *Betula lenta*



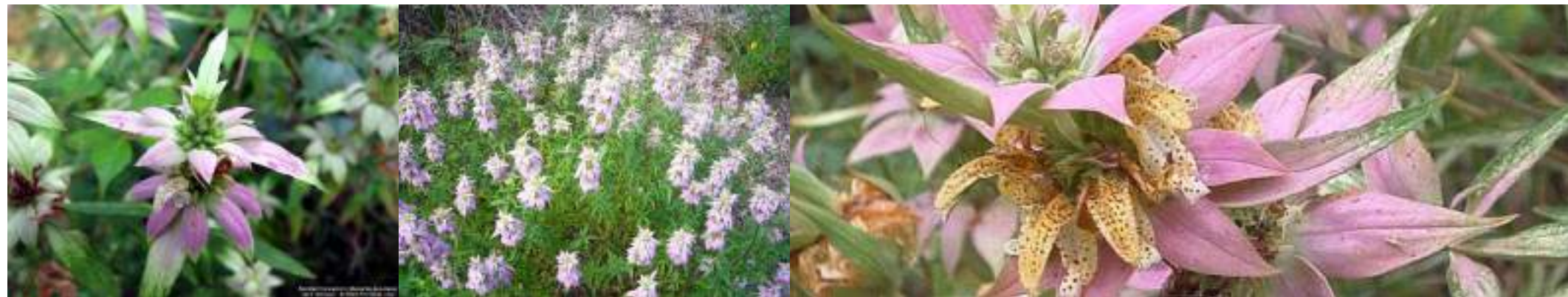
# HURON/ERIE LAKE PLAIN BEACH



American Beachgrass *Ammophila breviligulata*



Silverweed Cinquefoil *Argentina anserina*



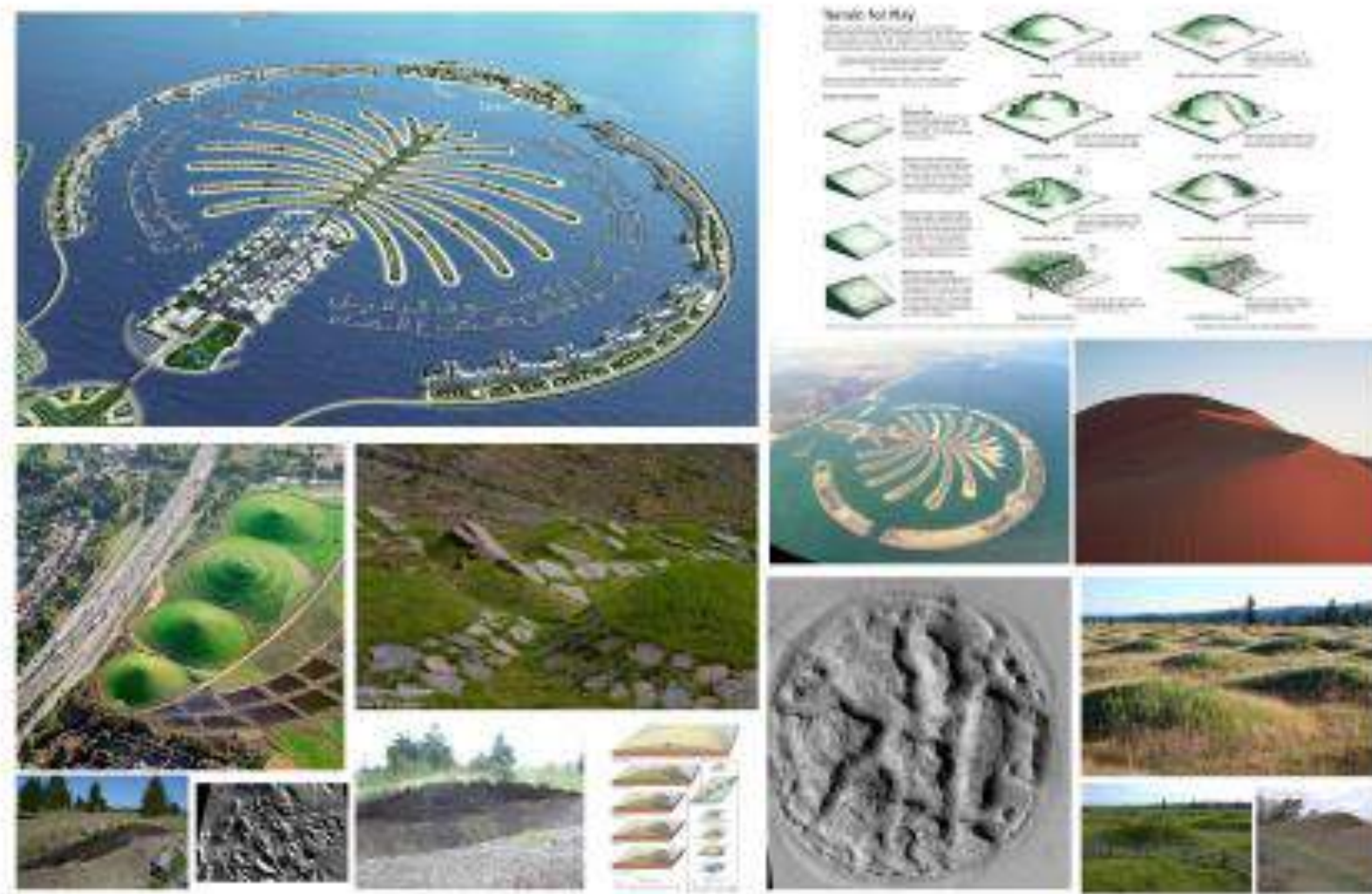
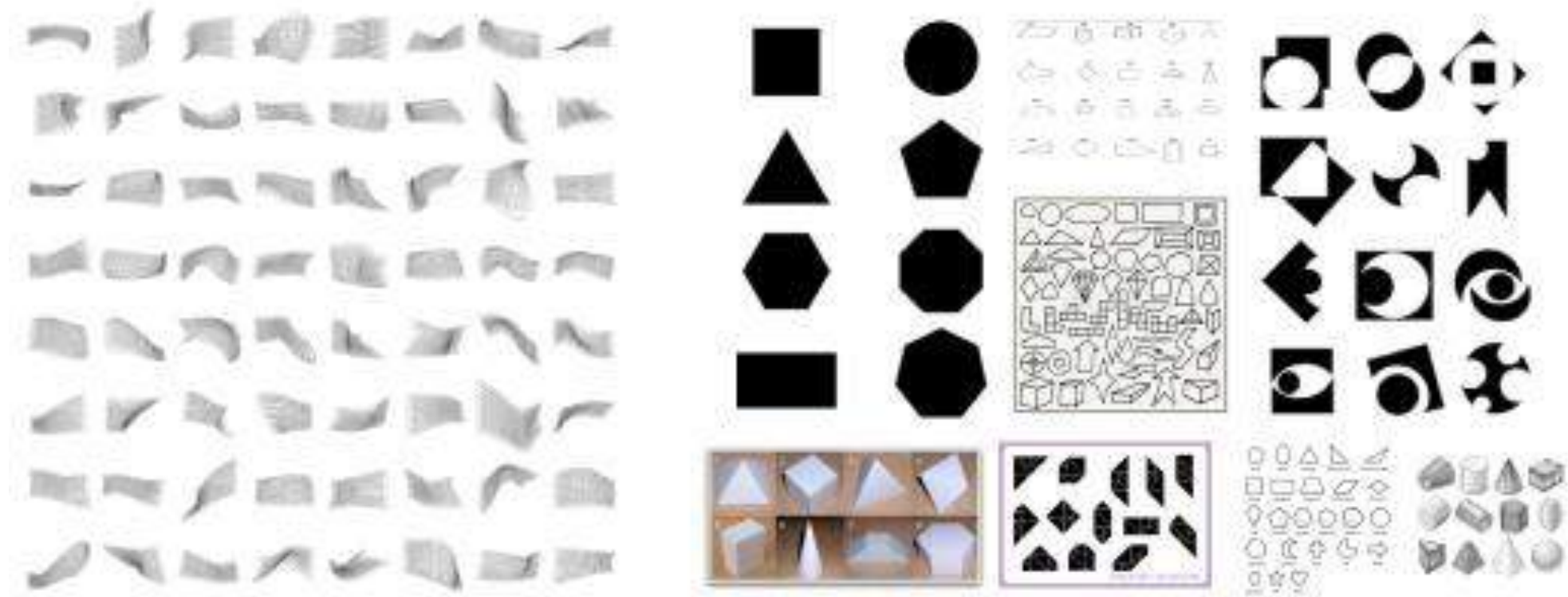
Spotted Horsemint *Monarda punctata*





“Another beautiful day in Cleveland”





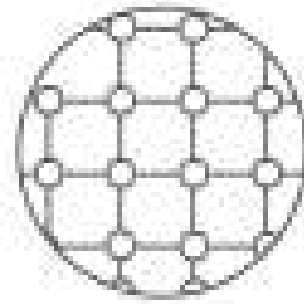
Landform texturing



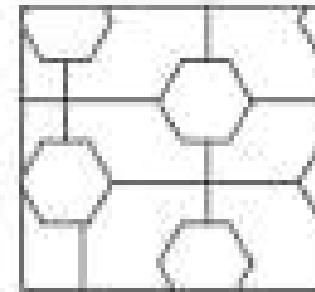
# FORM/TEXTURE STUDY

## GEOMETRIC FORMS

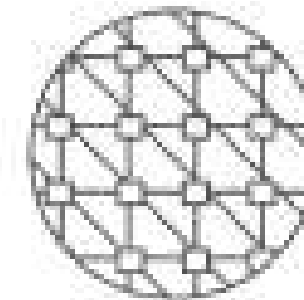
1. CIRCLE WITH FORMAL TEXTURE (REPITION ACTIVITY)
2. SQUARE WITH INFORMAL TEXTURE (RYTHM ACTIVITY)
3. CIRCLE WITH FORMAL TEXTURE (DIRECTIONAL RELATION)
4. SQUARE WITH RADIATION TEXTURE (GROUP RELATION)



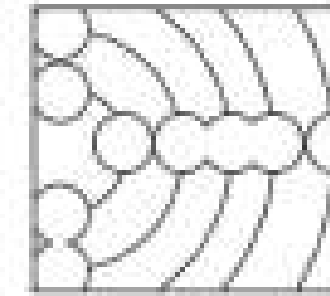
1.



2.



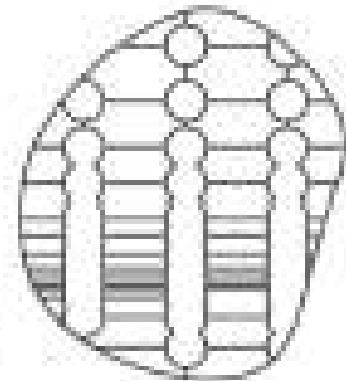
3.



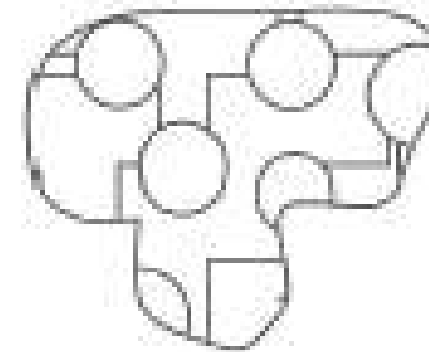
4.

## ORGANIC FORMS

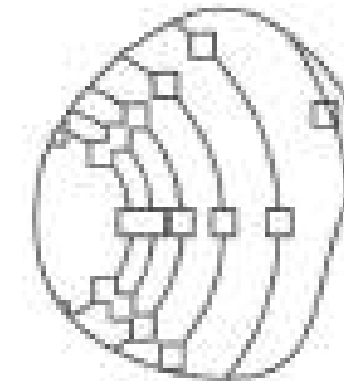
1. ORGANIC FORM WITH GRADATION TEXTURE (GROUP RELATION)
2. ORGANIC FORM WITH INFORMAL TEXTURE (DIRECTIONAL ACTIVITY)
3. ORGANIC FORM WITH RADIATION TEXTURE (DIRECTIONAL RELATION)
4. ORGANIC FORM WITH GRADATION TEXTURE (SPACE RELATION)



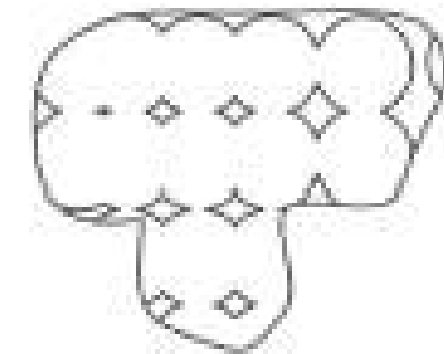
1.



2.



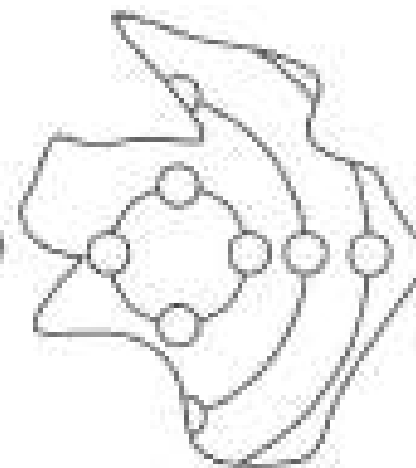
3.



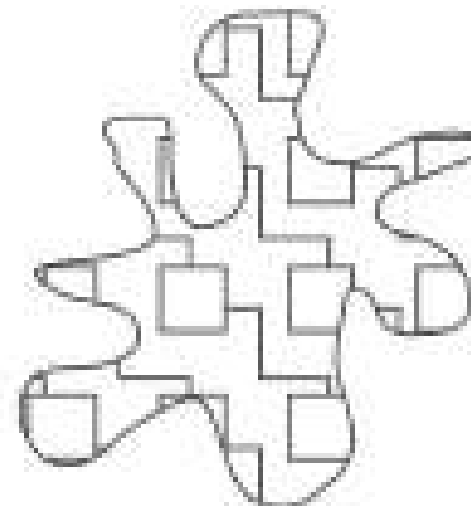
4.

## RANDOM FORMS

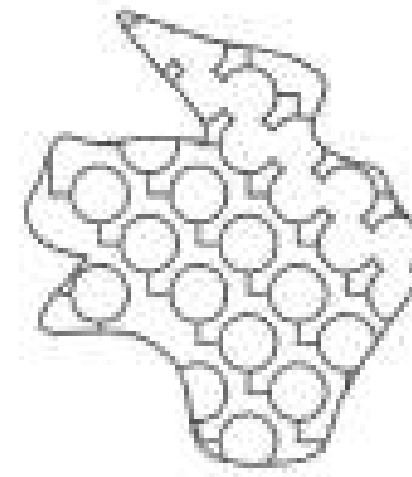
1. RANDOM FORM WITH RADIAL TEXTURE (BALANACED RELATION)
2. RANDOM FORM WITH INFORMAL TEXTURE (DIRECTIONAL RELATION)
3. RANDOM FORM WITH INFORMAL TEXTURE (DOMINANT RELATION)
4. RANDOM FORM WITH FORMAL TEXTURE (FREQUENCY ACTIVITY)



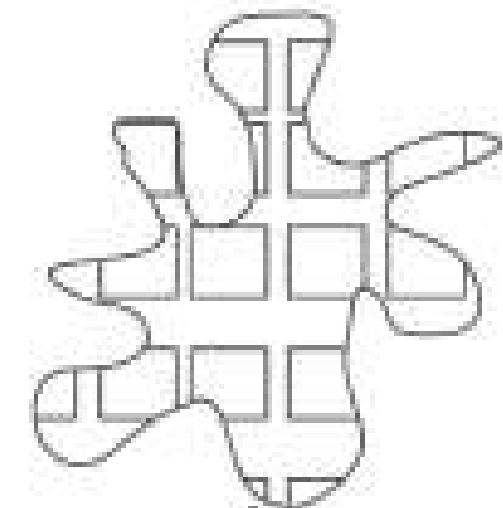
1.



2.



3.

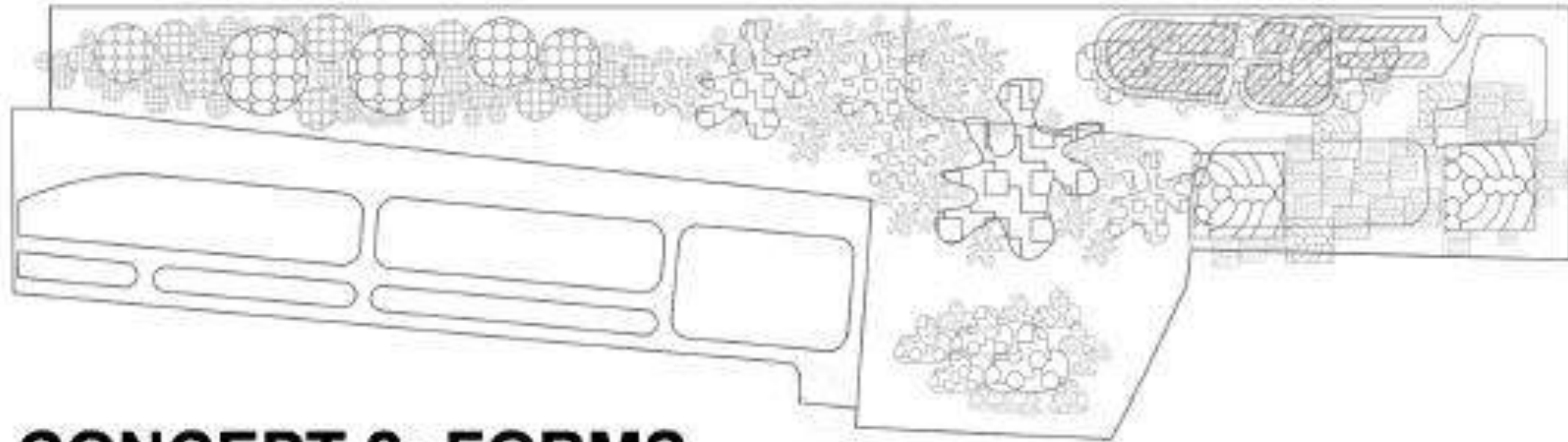


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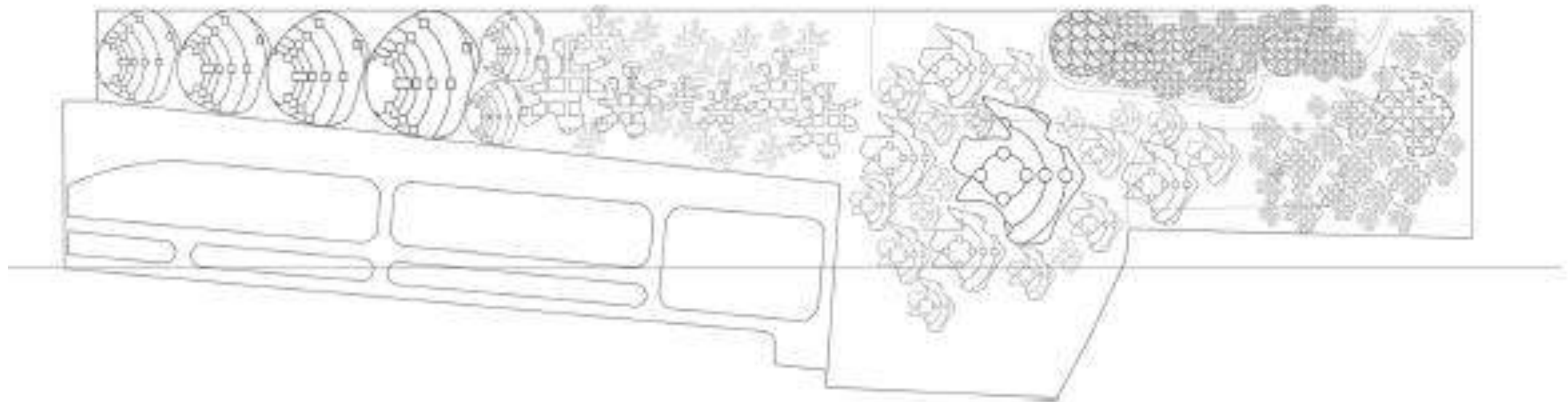
Conceptual studies



## CONCEPT 1: FORMS



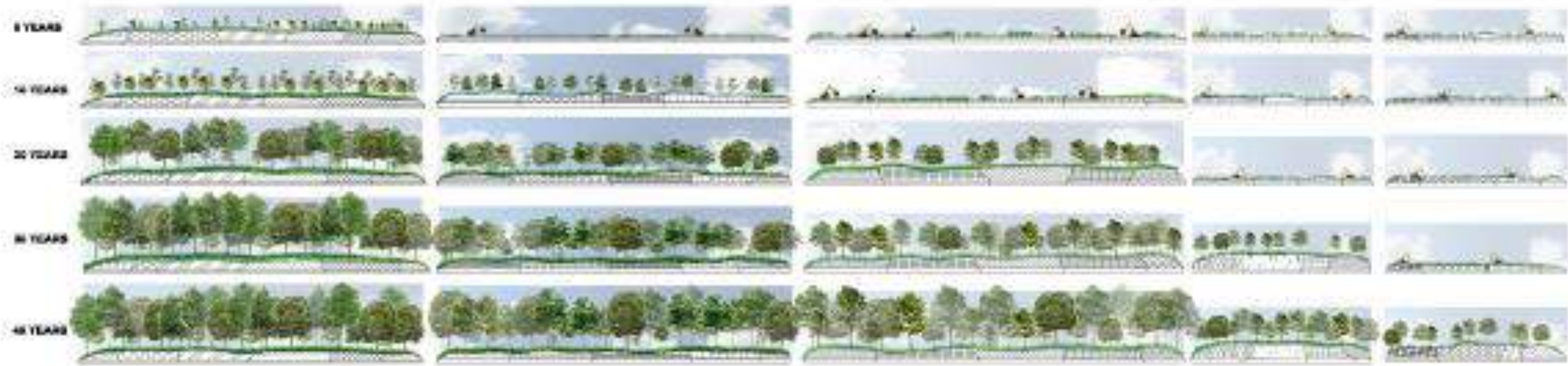
## CONCEPT 2: FORMS



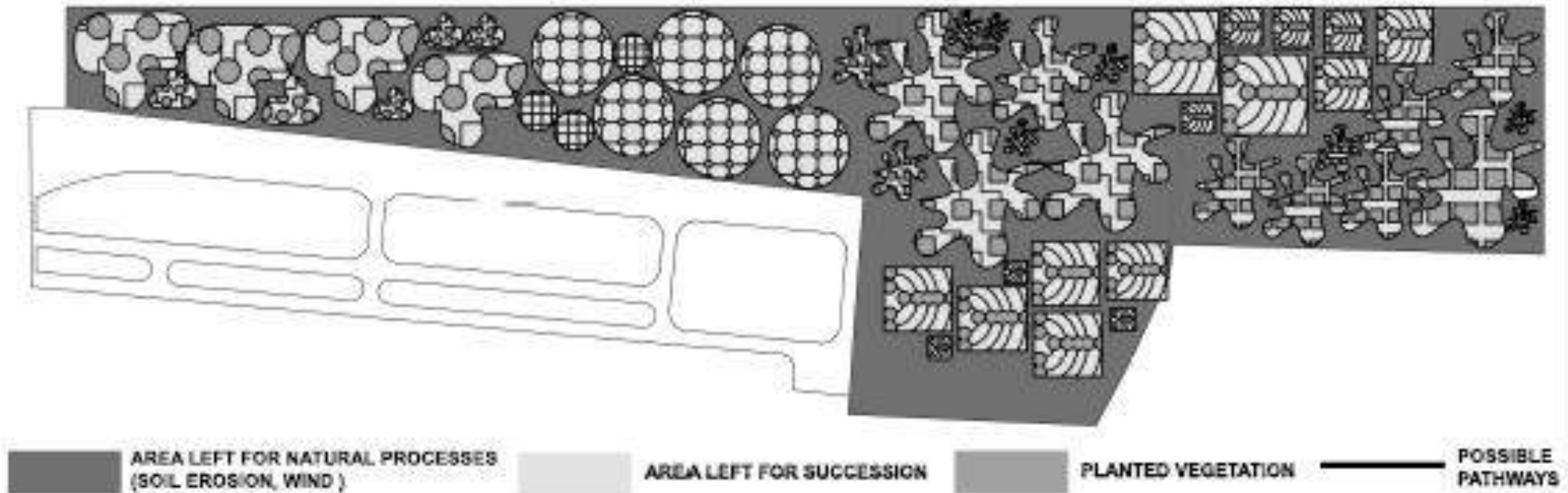
Concept development



## SECTION CUTS IN YEARS



## FORM CONCEPT MASTER PLAN



Master plan and phasing





1. SILVER MAPLE  
(ACER  
SACCHARINUM)



2. OHIO BUCKEYE  
(AESCULUS  
GLABRA)



3. SHADBLOW  
(AMELANCHIER  
CANADENSIS)



4. PAW PAW  
(ASIMINA  
TRILOBA)



5. RIVER  
BIRCH  
(BETULA  
NIGRA)



6. AMERICAN  
HORNBEAM  
(CARPINUS  
CAROLINEANA)



7. FRINGE TREE  
(CHIONANTHUS  
VIRGINICUS)



8. YELLOW WOOD  
(CLEDRASTRIS  
LUTEA)



9. SPINDLE TREE  
(EUONYMUS  
ATROPURPUREUS)



10. GREEN ASH  
(FRAXINUS  
PENNSYLVANCIA)



11. AMERICAN HOLLY  
(ILEX OPACA)



12. TUPLIP POPLAR  
(LIRIODENDRON  
TULIPFERA)



13. BLACK GUM  
(NYSSA  
SYLVATICA)



14. SOURWOOD  
(OXYDENDRUM)



15. EASTERN  
WHITEPINE  
(PINUS  
STROBUS)



16. PIN OAK  
(QUERCUS  
PALUSTRIS)



17. BLACK  
WILLOW  
(SALIX NIGRA)



18. AMERICAN  
HEMLOCK  
(TSUGA  
CANADENSIS)

# Planting palette





End of semester— abandon hope, all ye who enter here  
Expectations/Time Frame/Follow-up