

Tonia Andreina

Landscape Architecture Portfolio 2023

(not yet licensed in IL)



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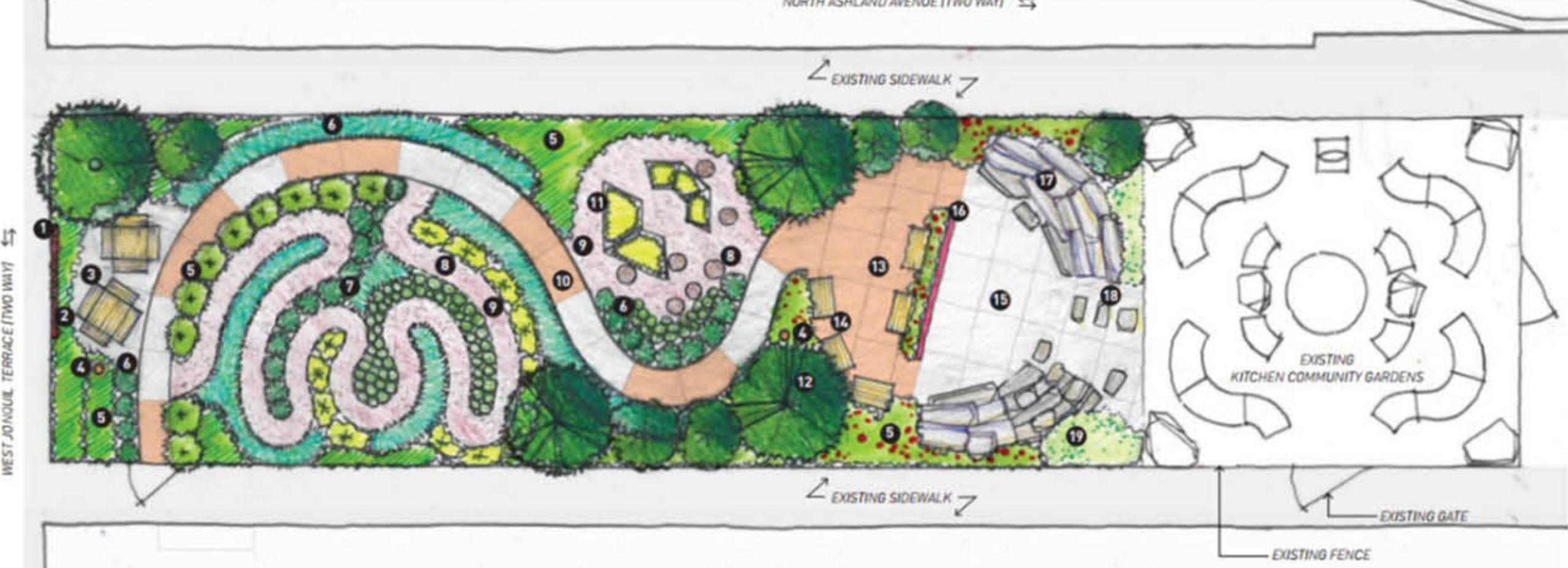
SECTION 1: Professional Experience



**p 3 - 7 : Gale, CPS School Youth-Led Community
Participatory Design**

**p 8 - 11 : Stewarding A Rare Savanna, Kankakee, IL
Black Farmers Cultivate Forgotten Skills**

CPS GALE ELEMENTARY SCHOOL, CHICAGO, ILLINOIS
Preliminary Design Presentation, Project Number: 8127
September 7, 2017



LEGEND:

1 SIGNAGE (FACING OUT)	5 SHRUB (N.L.C.)	9 MULCH	13 OUTDOOR LAB	17 TERRACED SEATING
2 INFORMATION BOARD (FACING IN)	6 VEGETABLE BED AT GARDE	10 CONCRETE	14 TABLE	18 STONE SEATING
3 PICNIC TABLE	7 LABYRINTH & COMMUNITY GARDEN	11 VEGETABLE BOX	15 OUTDOOR CLASSROOM	19 GROUND COVER
4 LIGHT POLE	8 STUMP SEATING (N.L.C.)	12 FRUIT TREE (N.L.C.)	16 CHALKBOARD	

Design Intervention - Students of Gale Academy in Rogers Park used to joke that the garden plots outside their classroom windows were graves. When I heard about the annual 49th Ward Participatory Budgeting process, a team of committed kids in an after school garden club I facilitated went to work, dreaming big, designing their own garden. Months of petitioning the community later, our garden project won second place ward wide and the kids' garden was funded, with a 34% increase in resident voting. Site Design won the bid to formalize their plan, originally drawn on a piece of yellow construction paper. This experience directly led me to pursue Landscape Architecture as a profession in an effort to be the community's designer.



Designers of Gale School Garden



Gale, CPS School Youth-Led Community Participatory Design (Professional)

Students and residents of north Rogers Park now fill this school garden in warm months, alongside blooms of columbine and echinacea grown from seed by Gale students in their indoor greenhouse.

As Director of The Genesis Project at non profit A Just Harvest in Rogers Park, I supported a youth-led redesign of the outdoor school garden.

In an underserved community experiencing higher rates of violence and poverty compared to other Chicago neighborhoods, residents voted for \$120k in public funds to make the students' garden vision a reality.

A grassroots youth-led campaign I facilitated garnered support ward wide. Speaking at the local park fieldhouse, sharing their message at CTA stations across the neighborhood, utilizing printed sunflower palmlets and telling every local they knew, the kids' effort resulted in a 34% increase in participatory budget voter turn out.

Site Design won the Landscape Architecture bid and took the piece of construction paper youth in the after school Garden Club I facilitated had drawn their vision on. The construction paper showed a labyrinth, large serpentine path, fruit trees and more, all of which Site Design kept where the kids had originally drawn them.

At the same school, the indoor greenhouse was also transformed to contain organically grown annual crop transplants and houseplants. Some of the same youth who designed their school garden were also in a paid 13 week summer certificate program I designed and facilitated where they would eventually consume fresh foods they personally grew from seed. Youth also sold some produce grown in nearby A Just Harvest high tunnel at the local Rogers Park Glenwood Farmers Market, building economic skills along with green thumbs.



School Garden Before Youth-Led Redesign (What Kids Called “Graves”)



Indoor School Greenhouse Before My Involvement & Regular Programming

Gale, CPS School Youth-Led Community Participatory Design (Professional)

The outdoor school garden and indoor school greenhouse were active before my involvement, largely due to the passionate initiation of these resources by my mentor and predecessor as Director of the Genesis Project, Anthony Boatman. Anthony had initially reached out to me while I was working across Howard street at the Peterson Garden Project Hello!Howard garden. He explained to me the school had these green spaces but he wanted more to “grow” in these spaces, including kids, plants and programming. That’s where my involvement began working with some of the coolest kids in Chicago to make the greenhouse and outdoor garden flourish.

We introduced house plants in addition to more annual crops for the outdoor school garden. Strategically synthesizing greenhouse needs with in-day and after-school programming, students learned how to cultivate from seed and propagate from stem while growing stewardship skills. Programming helped take care of the indoor growing environment while students learned how to address maintenance and pest treatment organically with methods like Integrated Pest Management (IPM) and keeping a clean environment.

Kids got to experience different textures, scents and colors all thanks to plants. I designed and implemented all curriculum. Programming taking place during the school day was aligned with Next Generation Science Standards, meeting longstanding teacher hesitancy toward greenspaces with practical markers they could buy into.

As trust from staff grew so did our plants and the diversity of projects and experiences taken on by garden club. Youth decided to plant the large outdoor cement planters with cannallilies donated by a local friend. Kids learned about rhizome root systems and how plants store energy. In autumn, we took the same roots transferred outdoors, dug them up and wrapped them in old cannallily leaves and newspaper for passive moisture and protection from the elements over winter. Spring came again and we transferred the rhizomes to the outdoor school garden and elsewhere around the school for everyone to enjoy.

Kids also took on serious issues in garden club like environmental pollution, sharing what they knew already with each other and watching selected media, youth shared their ideas about environmental pollution implications, as well as how our local actions might impact different types of pollution for the better. Youth were encouraged to consider themselves problem solvers and powerful agents of change as they matured into adolescence and wanted to have a local impact on their community.

Students diverse cultural backgrounds were also celebrated. Many youth were originally from countries beyond the United States. We shared perspectives on plants, how our grandparents grew or used them, how our families would use plants to celebrate and how we might bridge those memories and experiences with our local school community.

Our programming grew and so did our slogan, a spin off of the school “We Grow Kids”, ours was “We Grow Life!”



Students Transplanting Soil Blocks of Perennial Sage Grown from Seed



Youth Learn About A Greenhouse Pest Then Begin Organic Treatment Plan



Indoor School Greenhouse After My Involvement: Annual Plants



Indoor School Greenhouse After My Involvement: Youth Programming



After School Garden Club Learning About Cannallilies & Rhizome Roots



After School Garden Club Learning About Environmental Pollution



Outdoor School Garden After My Involvement: In-School Youth Program



Students Decide Between Two Final Plan Options for their Garden



Sunflower Palmlettes Used by Students in Grassroots Voter Awareness Campaign



Youth Presenting Their Ideas for School Garden at Willye White Fieldhouse



Campaign Materials Used in Online Social Media and Email Promotion



Students Learning How to Transform Local Materials into Seasonal Decor



After School Garden Club Students Participating in MiniChefz Cooking Class



Youth Explaining Their Project to Potential Community Voters with Pride



Youth Approach Neighbors, Asking for Support on Their Garden Vision

Gale, CPS School Youth-Led Community Participatory Design (Professional)

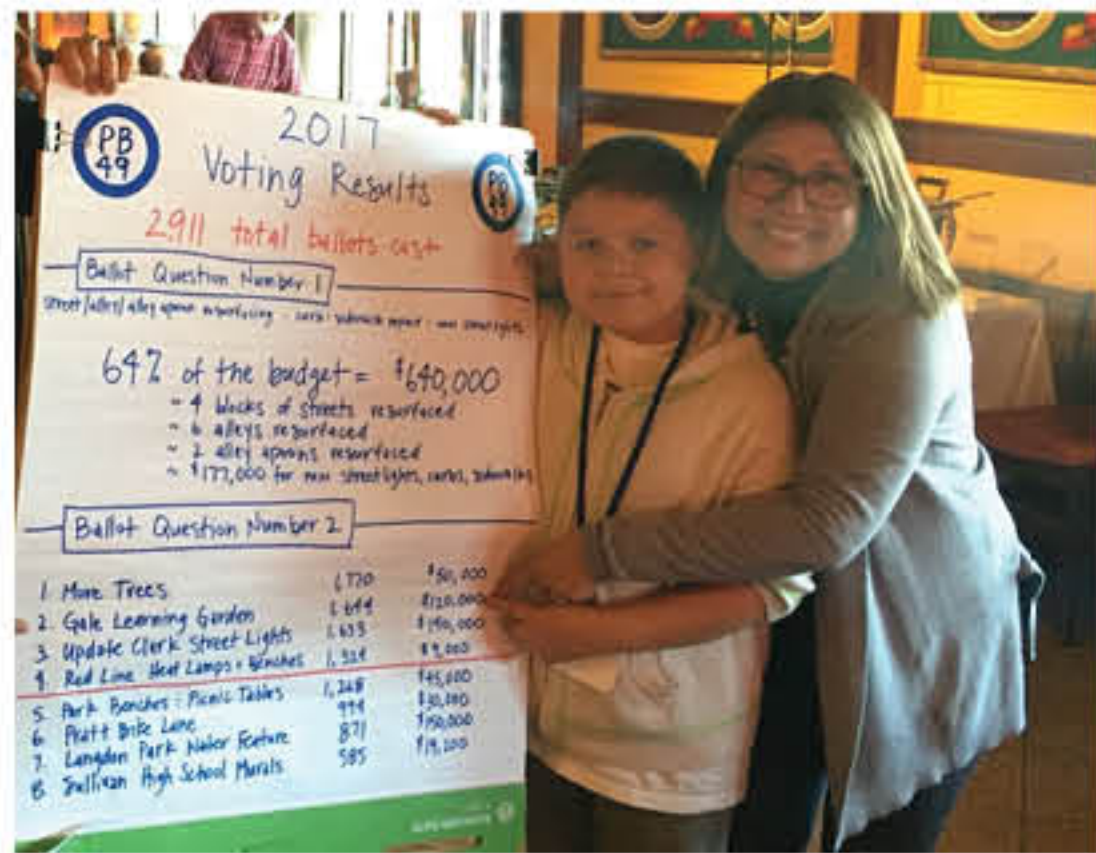
As kids learned to grow their own food, they learned to eat it too. Harvesting fresh produce from the outdoor garden we also partnered with a Northwestern University Program, MiniChefz. MiniChefz was facilitated by university students every week. Garden club kids would participate in the program, building cooking skills after school. This collaboration resulted in my Community Partner Award from Northwestern University.

Before the most significant part of the garden redesign was funded to match all this programming, I partnered with local community volunteer and professor emeritus Carol Melnick to write a grant application with Big Green (formerly The Kitchen Community). Our school was awarded one of their gardens, valued at around \$80k.

Upon receiving the Big Green grant, I asked their team if our kids could design it. Staff explained to me that was the first time anyone had ever asked that and that their gardens consisted of prefabricated beds. A little conversation and brainstorming later and they agreed it was a great idea to have the kids design the garden themselves. The Big Green Garden Designer offered to send me PDFs of their garden beds in plan view so youth in the after school garden club could design their own garden accordingly.

After a club-wide design session discussing path width, circulation flow, artistic appeal and function, two of the kids' designs, pasted on repurposed cardboard with glue sticks, were deemed worthy of our garden. Garden club participants voted on the two final designs, eventually agreeing on the winner, collaboratively.

Working our way through the 6 month process of getting on the ballot, youth eventually spoke at the local park fieldhouse and asked neighbors to vote for them and their dream.



49th Ward Voting Results - Gale Learning Garden Won in Second Place



Gale Students Celebrate Funding of Their School Garden Transformation



Garden Designers Transplant Perennials in their New School Garden



Christy Webber Employees Bring Big Green Beds in After Hardscaping



Community Grows As Youth and Parents Get Involved in The Garden



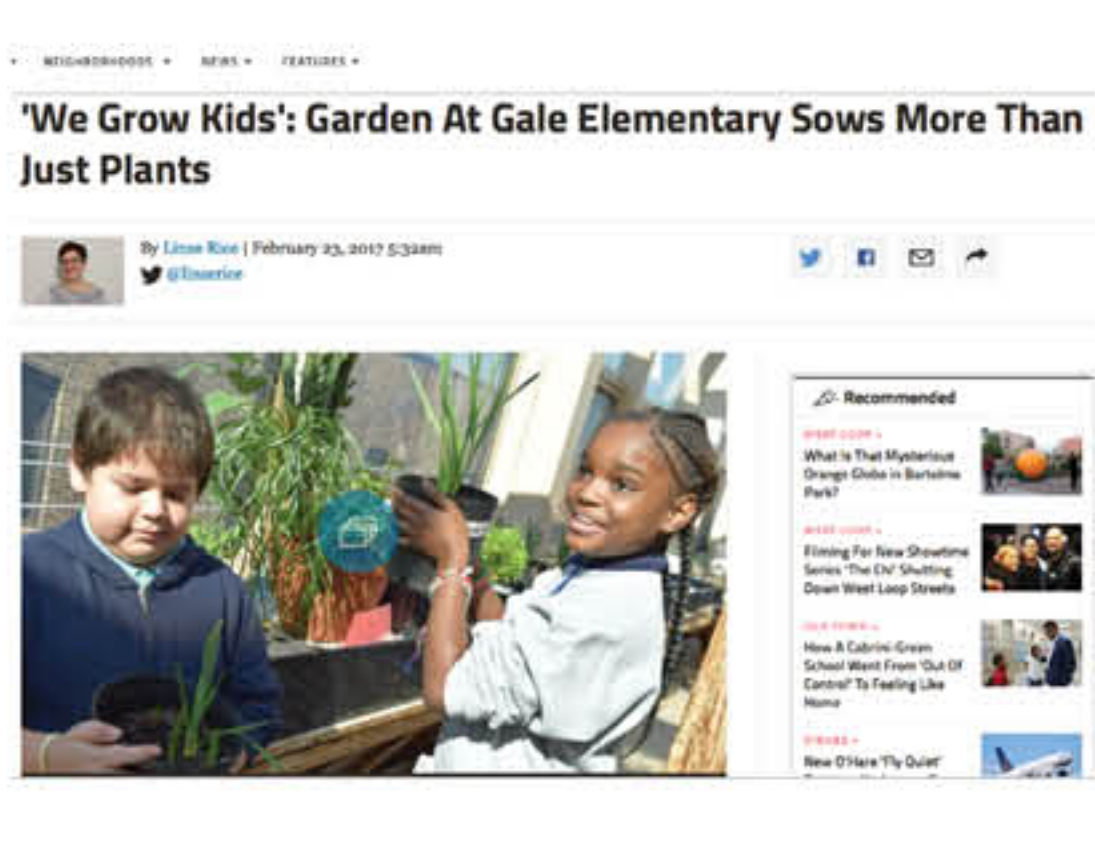
Our Greenspaces Receive A Chicago Excellence in Gardening Award



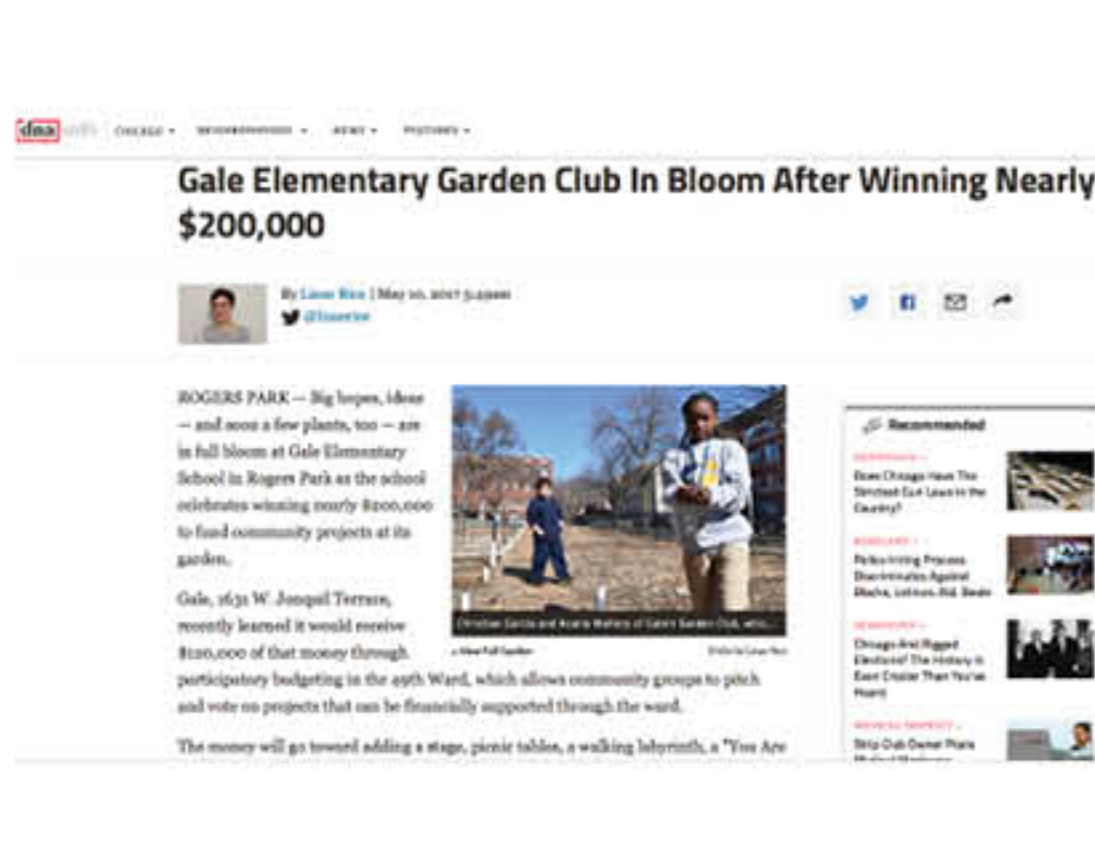
Year Two in the School Garden, Perennials Planted by Youth Thrive



Community Opening Event At The Newly Designed Garden, We Did It!



Local DNA Info Covers Our Story, Growing Excitement



DNA Info Celebrates Our Accomplishment With A Follow Up Article

**Gale, CPS School
Youth-Led Community Participatory Design (Professional)**



Information from Past Shows Podcasts

October 8, 2017 – Start the Garden Revolution

10/07/2017 · Mike Novak · A Just Harvest, Chicago Excellence in Gardening Awards, economic opportunity, environment, Gale Community Academy, gardening, mass extinction, native plants, sustainability, The Mike Novak Show, urban agriculture

Author and native plant landscaper Benjamin Vogt talks about his new book, A New Garden Ethic: Cultivating Defiant Compassion for an Uncertain Future. Gale Community Academy Principal Augustine "Augie" Emuwa and A Just Harvest's Rev. Marilyn Pagán-Banks and Tonia Andreina are teaching students about growing food.

Mike Novak Show Hosts Our Leadership on Local Chicagoland Radio



Community Youth Take Measurements, Siting High Tunnel Footprint



Community Digs Post Holes, Establishing Critical Structure for High Tunnel



Progress is Made, Lifting the First High Tunnel Tubing Into Place

Gale, CPS School Youth-Led Community Participatory Design (Professional)

Youth and Community were involved in establishing the A Just Harvest High Tunnel as well. This 24' x 26' structure was brought in to facilitate more independent food production for the Community Kitchen aspect of A Just Harvests work, always increasing fresh food access.

Youth involved in other programming got involved with this project as well. Staff, students, parents and other volunteers worked hard to get the high tunnel operational.

Planted with cucumbers and tomatoes, kids in the summer Certificate Program who grew the plants from seed in the school greenhouse continued to harvest fruits off the same plants. Bringing harvests to the local farmers market, participants also grew entrepreneurship and marketing skills.



Volunteers Get Involved in Building the High Tunnel



High Tunnel Construction is Completed, Ready to Grow Community Food



High Tunnel is Established, Planted With Cucumbers and Tomatoes



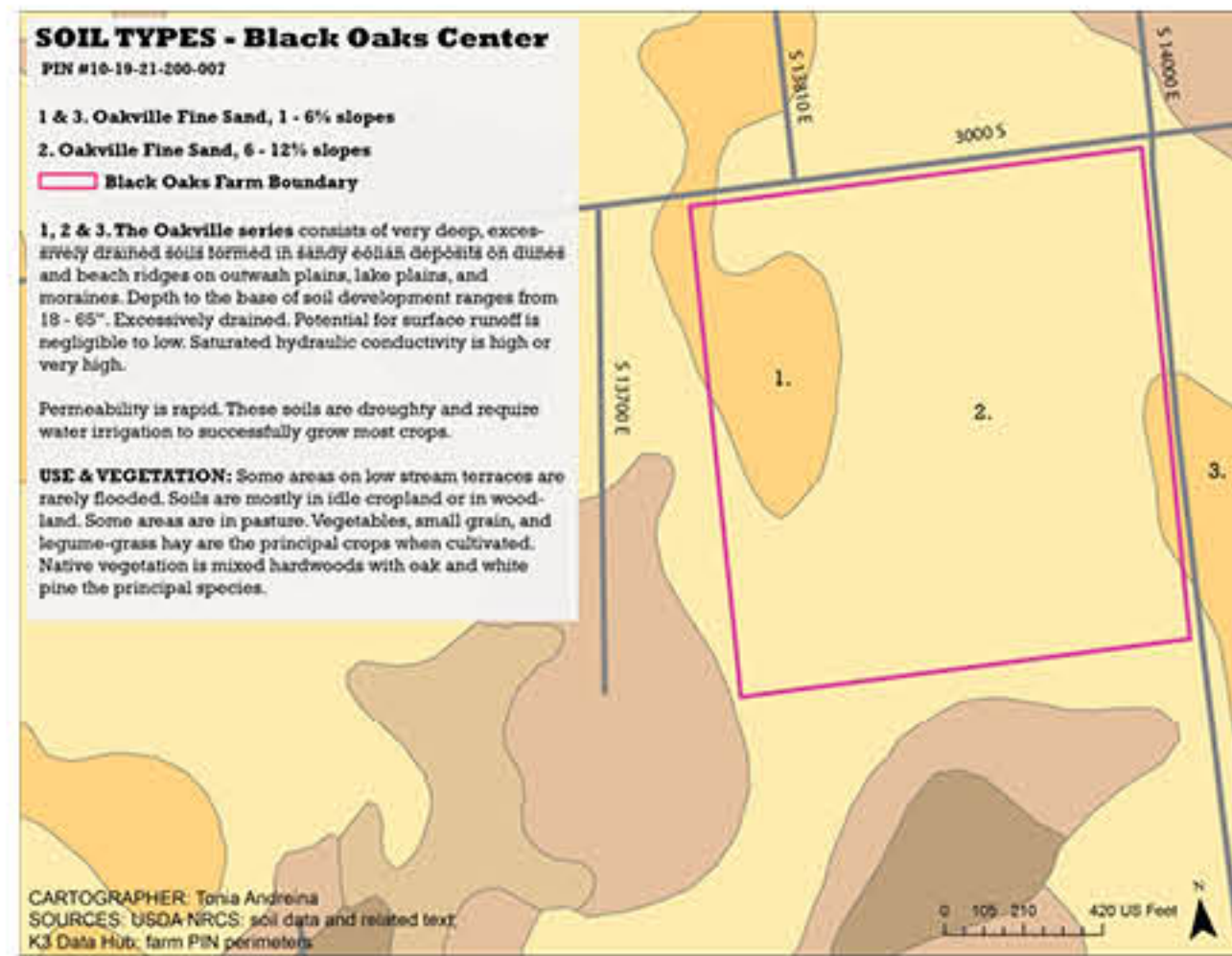
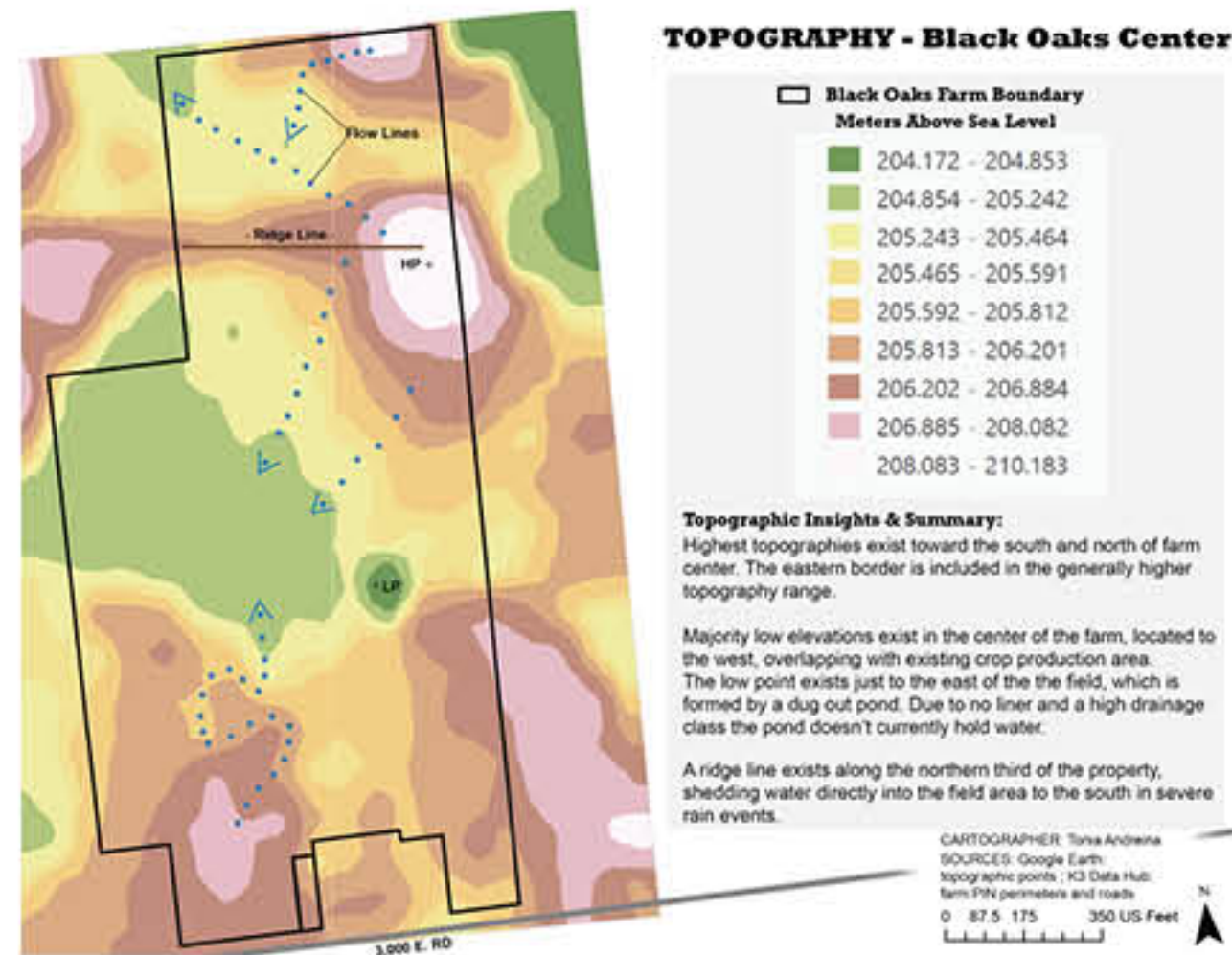
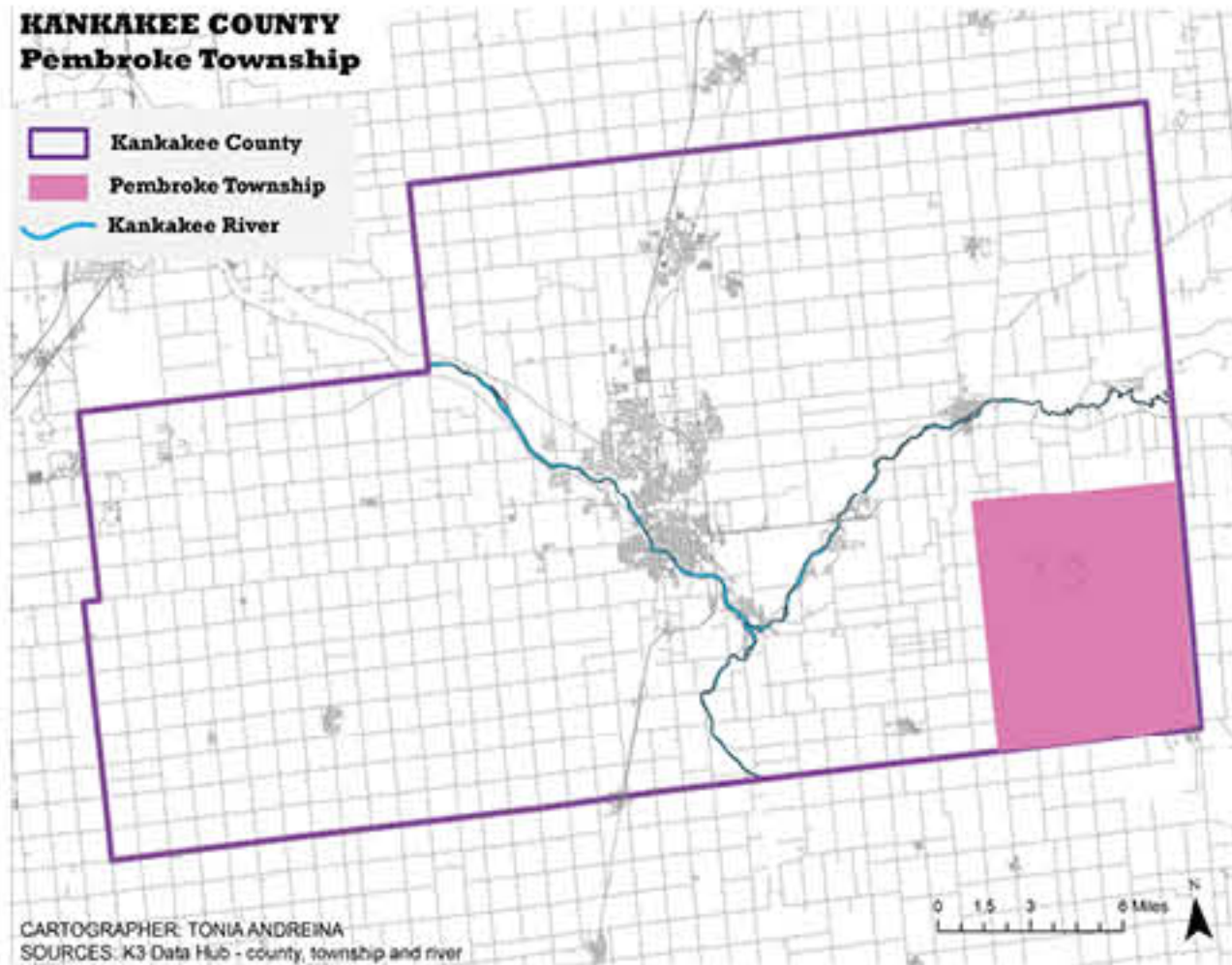
Youth Involved in Growing Produce Take It From Seed to Farmers Market



Farmers Market Temporary Tattoos



Taking Inventory Before Local Tomato Sale



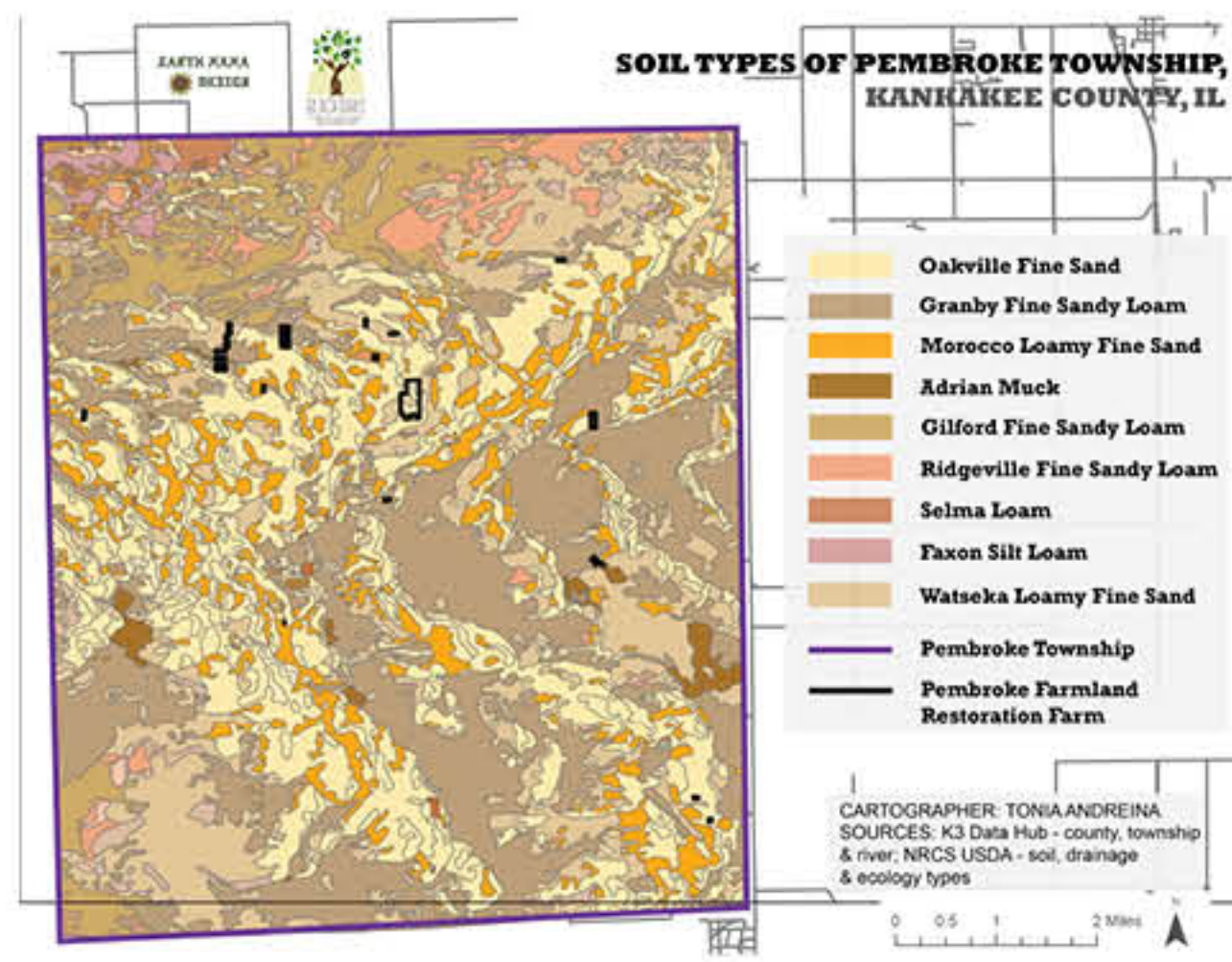
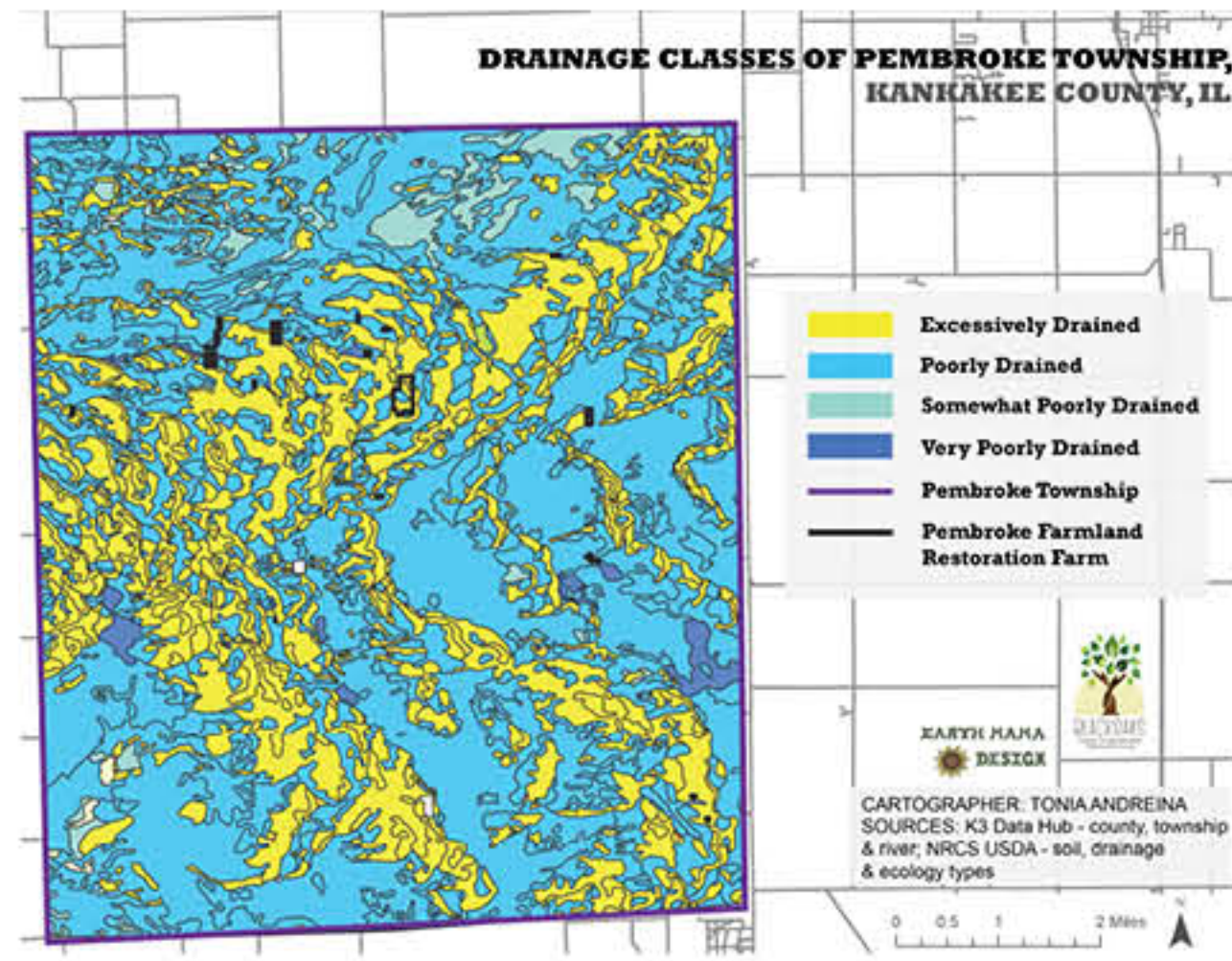
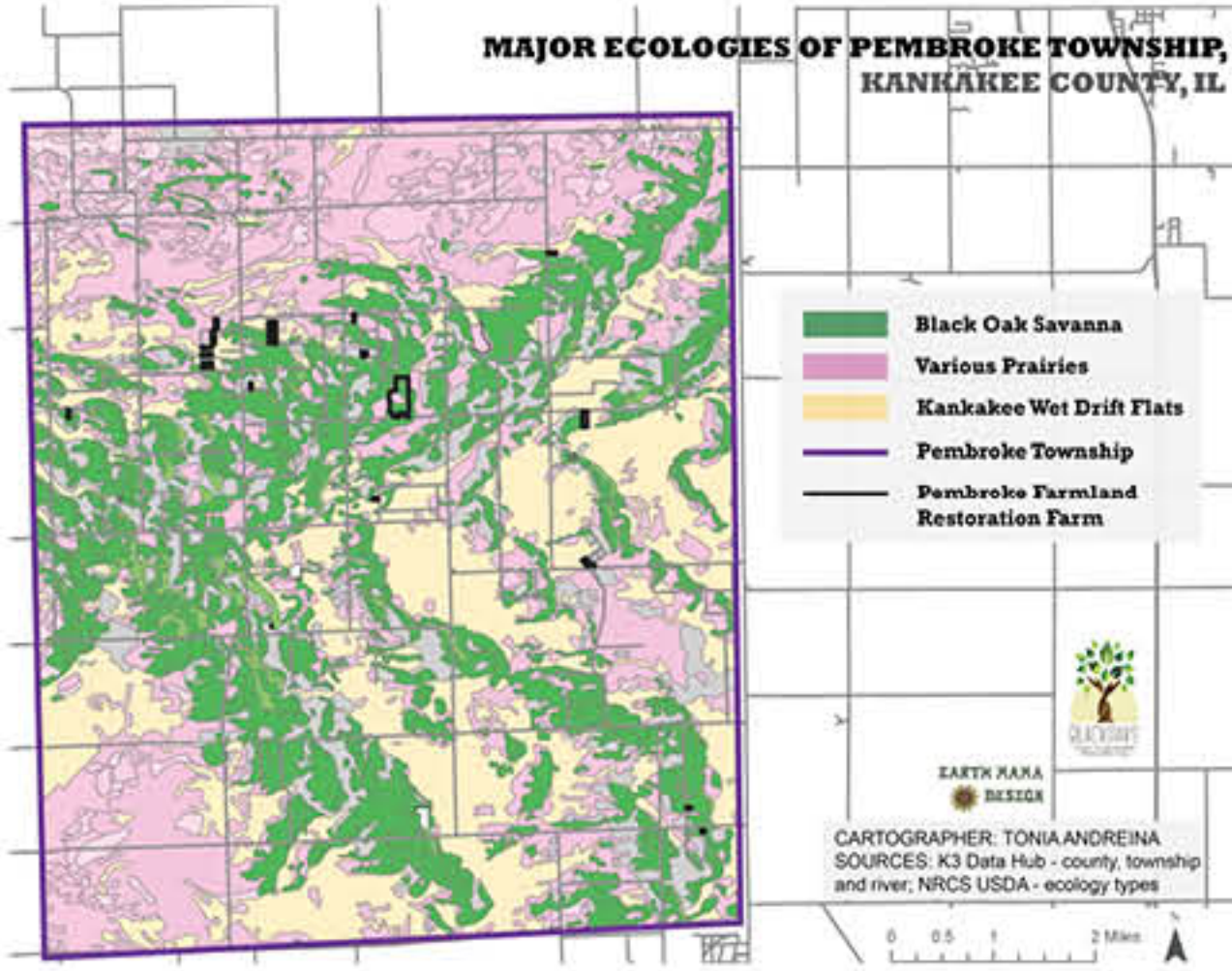
- SAVE THE DATE -

PER COMMUNITY LEARNING DAY EVENTS - AUTUMN 2022

SEPTEMBER 15 SOIL TYPES, BUILDING & FERTILITY WORKSHOP 10 AM - 2 PM @ BLACK OAKS CENTER KANKAKEE SOIL AND WATER CONSERVATION DISTRICT	SEPTEMBER 24 HIGH TUNNEL INSTALLATION & BLUEBERRY CULTIVATION PREP 9 AM - 11:30 AM @ BLACK OAKS CENTER & 12:30 PM - 3 PM @ LOS RANCHOS NUNEZ UNIVERSITY OF ILLINOIS EXTENSION
OCTOBER 1 WORKING LANDS - PART 1; FORAGING FOR MARKETS 10 AM - 12 PM @ SASAFRASS FARM & 1 PM - 3 PM OBSIDIAN RISING FARM CHANDLER WOMACK	OCTOBER 8 MEDICINAL AGROFORESTRY 9 AM - 12 PM @ BLACK OAKS CENTER DR. JIFUNZA WRIGHT-CARTER, M.D., M.P.H. BLACK OAKS COMMUNITY LAND CELEBRATION 12 PM, ALL INVITED!
OCTOBER 13 COMPOST PRODUCTION & FERTILITY WORKSHOP PART 1 OF 3 9 AM - 1 PM @ BLACK OAKS CENTER NANCE KLEHM OF SOCIAL ECOLOGIES	OCTOBER 23 COMPOST PRODUCTION & FERTILITY WORKSHOP PART 2 OF 3 9 AM - 1 PM @ BLACK OAKS CENTER NANCE KLEHM OF SOCIAL ECOLOGIES
NOVEMBER 5TH BLUEBERRY PLANTING INTENSIVE 9 AM - 5 PM @ LOS RANCHOS NUNEZ KEITH URIDEL OF BACKYARD BERRY PLANTS	

- MORE CLASSES TBD -

CHECK OUT BLACKOAKSCENTER.ORG AND RELATED SOCIAL MEDIA FOR UPDATES



Stewarding A Rare Savanna, Kankakee, IL

Black Farmers Cultivate Forgotten Skills (Internship)

Partnering with Black Oaks Center, a non profit based in Pembroke Township of Kankakee county, IL, I developed the existing farmer training program and created related graphic materials supporting farm design process in the rare Black Oak Savanna.

This portion of Kankakee County used to be known as "the food pantry of Chicago" during massive urbanization of the late 1800's into early 1900's. The area was primarily cultivated by Black farmers who had symbiotic relationships with native people of the Potawatomi tribe. Here, I organized a Community Learning Day series for the Pembroke Farmland Restoration (PFR) program hosted by Black Oaks Center. During the series, Pembroke land owners met with regional experts in niche farm related topics for skill transfer introductions to things like composting, fruit tree cultivation and biochar production.

I implemented ArcGIS to make maps of soil types, drainage classes, original ecologies and topographies for the entire township as well as individual farms. Informing farm crop selection, I collaborated with farmers to make specific species suggestions according to their goals and site conditions across their land.



Farmers Inspect Soil and Moss Under A Lens at A Composting Workshop



Composting Workshop Teacher Nance Klehm Leads A Slate Test of Soils



A Farmer Proudly Shows off His Sugar Cane and Memories of Mexico



Bronwyn Conducts Site Visits Discussing Possible Land Use Suggestions



Emerging From A Field in The Black Oak Savanna With Sugar Cane in Hand



Growers Explore the Black Oak Savanna As Conversation Develops



Farmers Gather in The Yurt to Discuss Soil Composition and Gradients



Farmers Observe Soil and Rock Samples In The Yurt Before Going Outside

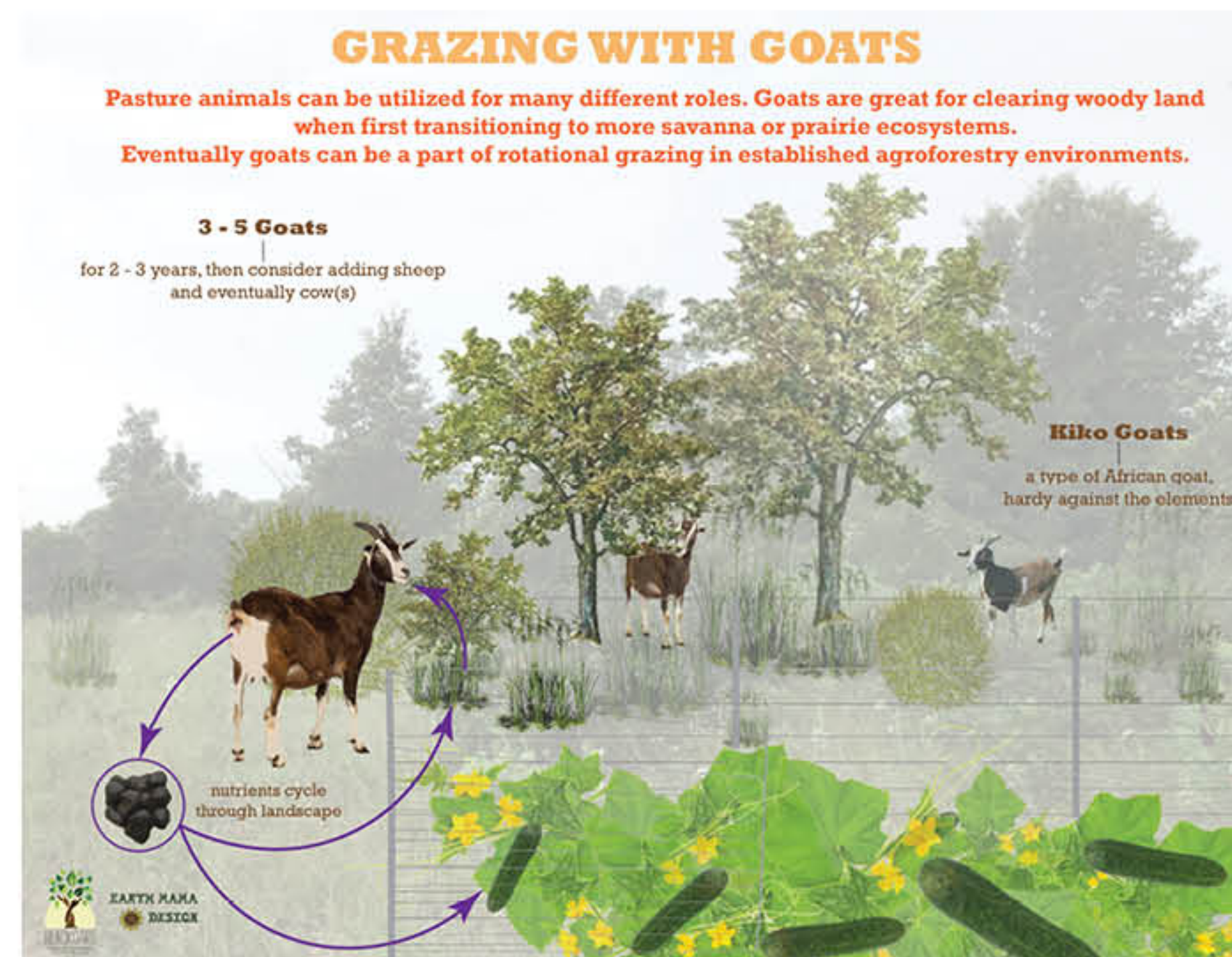
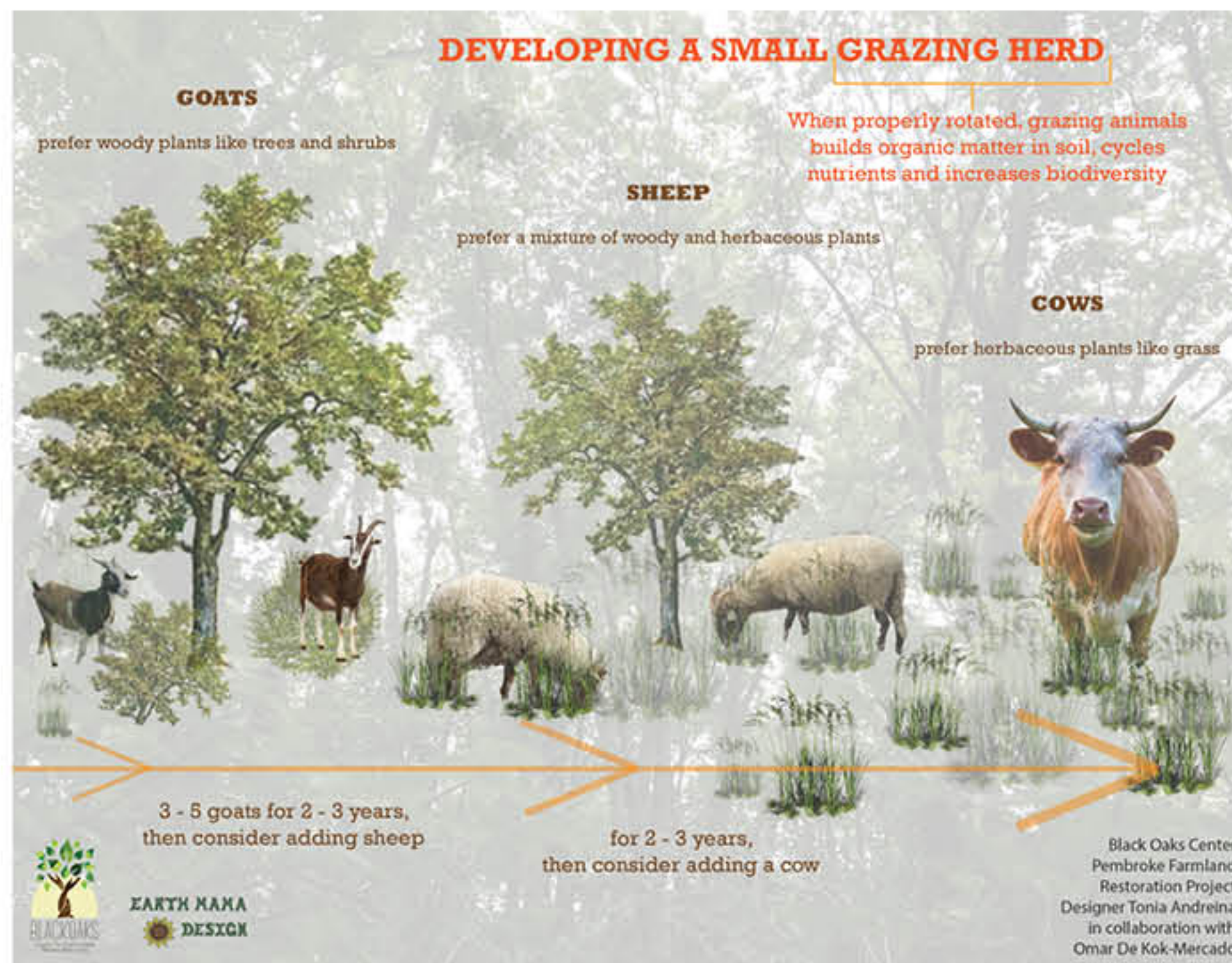


High Tunnel Teacher Bronwyn Ali Discusses Structural Styles With Farmers



Grandchildren of Farmers Start Learning About Hornworms

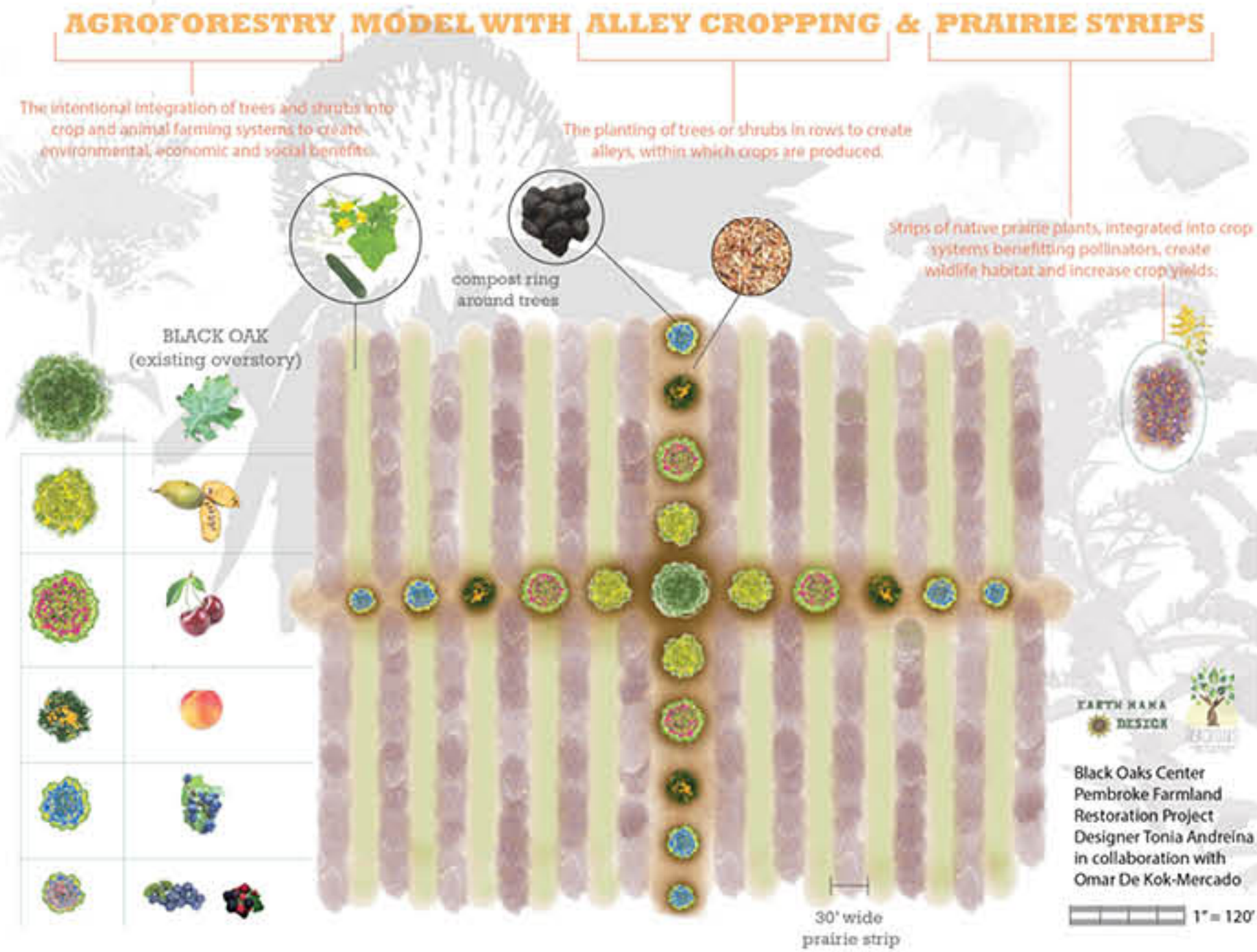
Stewarding A Rare Savanna, Kankakee, IL Black Farmers Cultivate Forgotten Skills (Internship)



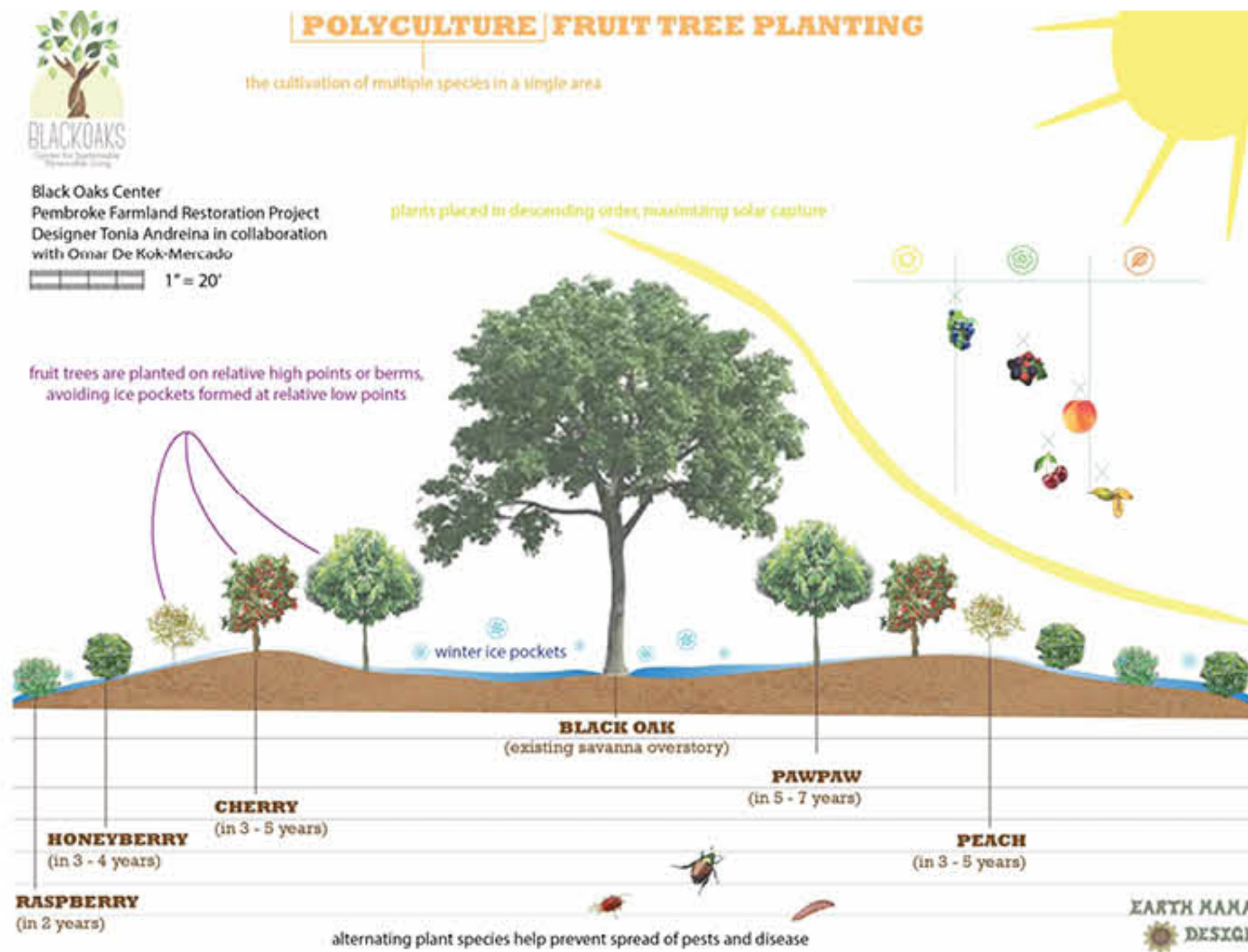
Stewarding A Rare Savanna, Kankakee, IL
Black Farmers Cultivate Forgotten Skills (Internship)

Partnering with the Savanna Institute Technical Service Provider, I made infographics for farmers relating his suggestions. Site-specific land use recommendations included establishing grazing herds and multi layered agroforestry planting arrangements. Both processes allow farmers to cultivate their land, developing local economies while maintaining rare ecologies of the Black Oak Savanna. Graphics relay critical information, simplifying new ideas.

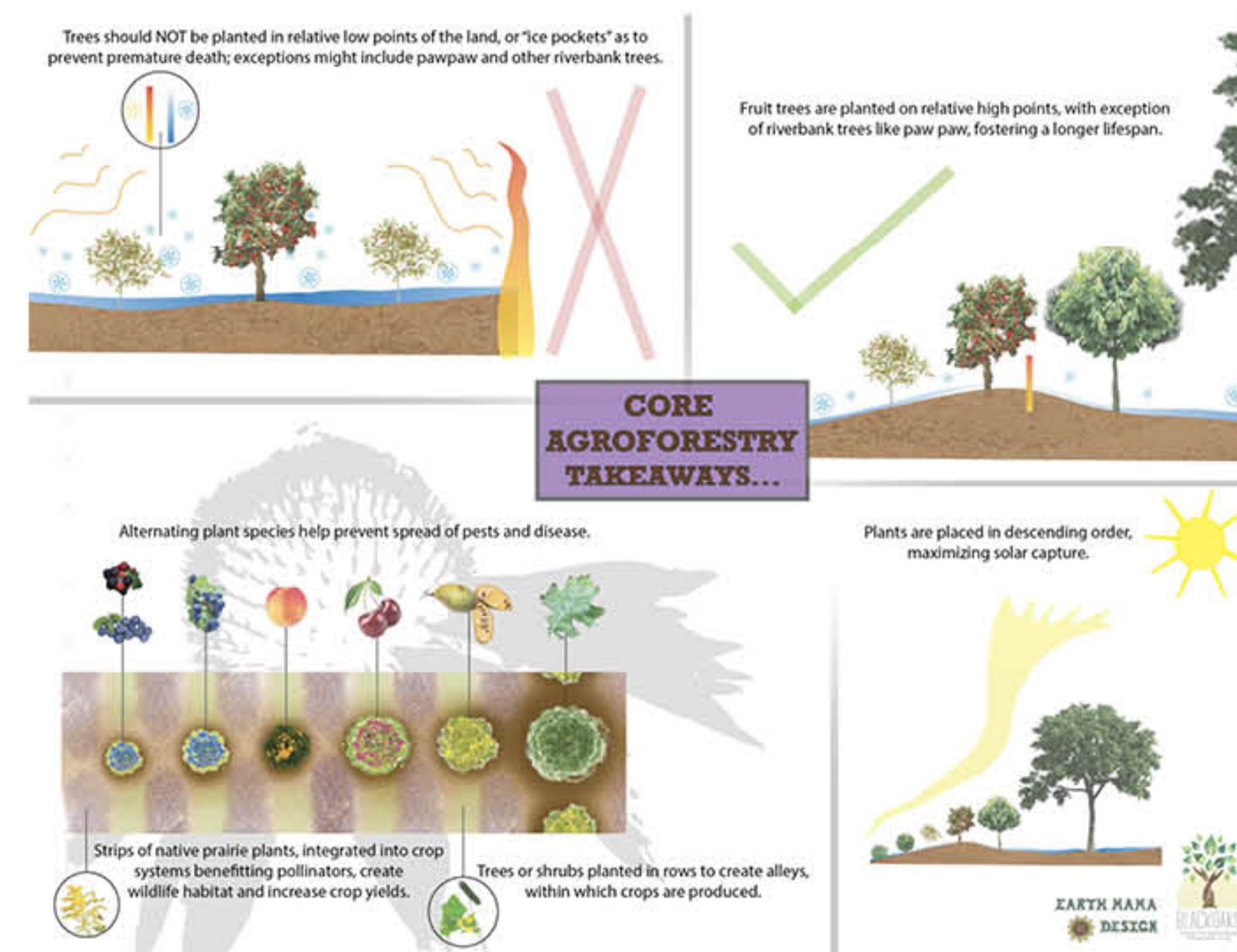
Design Intervention - Infographics for Farmers



Design Intervention - Infographics for Farmers



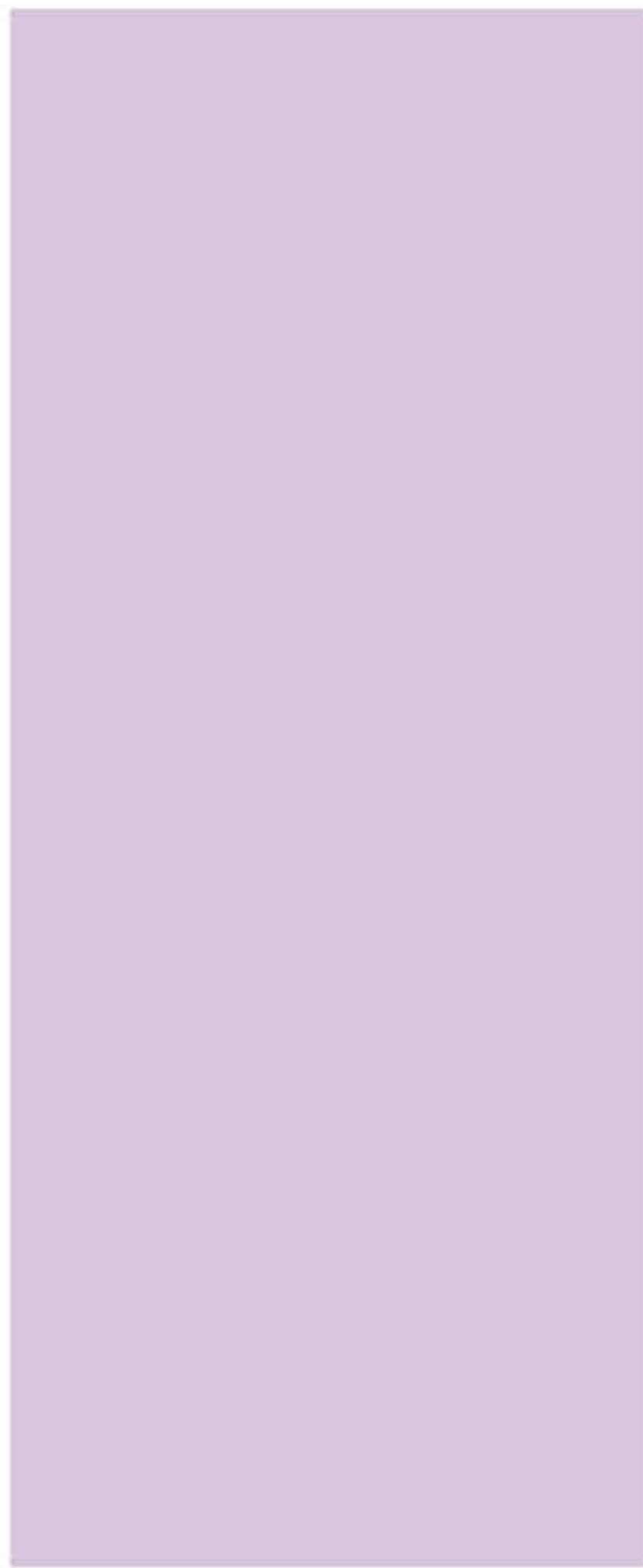
Design Intervention - Infographics for Farmers



Stewarding A Rare Savanna, Kankakee, IL Black Farmers Cultivate Forgotten Skills (Internship)

Multilayered planting selection organizes space, maximizing solar capture and crop production. Fruiting trees and shrubs make use of the existing black oak overstory layer; by planting in open spaces of the savanna, fruit trees make use of existing land patterns. Prairie strips are included in the crop plans, expanding habitat for local pollinators who support seasonal functions like pollination while expanding habitat for native lepidoptera.

SECTION 2:
Earth Mama Design,
Entrepreneurial Initiative



p 13 : Alley Garden, Evanston, IL
Condo Retreat

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Prioritizing Pollinators

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Watery Wooded Edge Becomes Habitat



Design Intervention - Completed Project From Client Condo Reveals Material Complexity Including Stone, Wood, Herbaceous and Mulch

Alley Garden, Evanston, IL Condo Retreat (Earth Mama Design)

Immediately bordering an urban alley under dense tree canopy, residents of a condo association struggled for years to establish what felt like a peaceful escape from city life with limited land.

I introduced shade tolerant blooms for multi-seasonal interest and built on a playful fairy garden theme, desired by the client. A log bed with splashes of vegetated color bridges bloom times while a singular sunny spot features showy trumpet vine, trellised to hide an unsightly electricity box. I also constructed a dry-stacked fon du lac stone border to frame the existing bluestone path and planted a beautiful weeping redbud, delivering native and compact-compatible aesthetic goals for the site.

Pollinator friendly sweet woodruff was scattered throughout the ground plane to support local ecology and bring in shade proof scent while combatting weed competition.

A grass patch was turned over on itself, covered with compost and planted as a focal point containing some of the showiest blooms along the building edge, drawing attention away from surrounding alley and trash cans just opposite the fence.



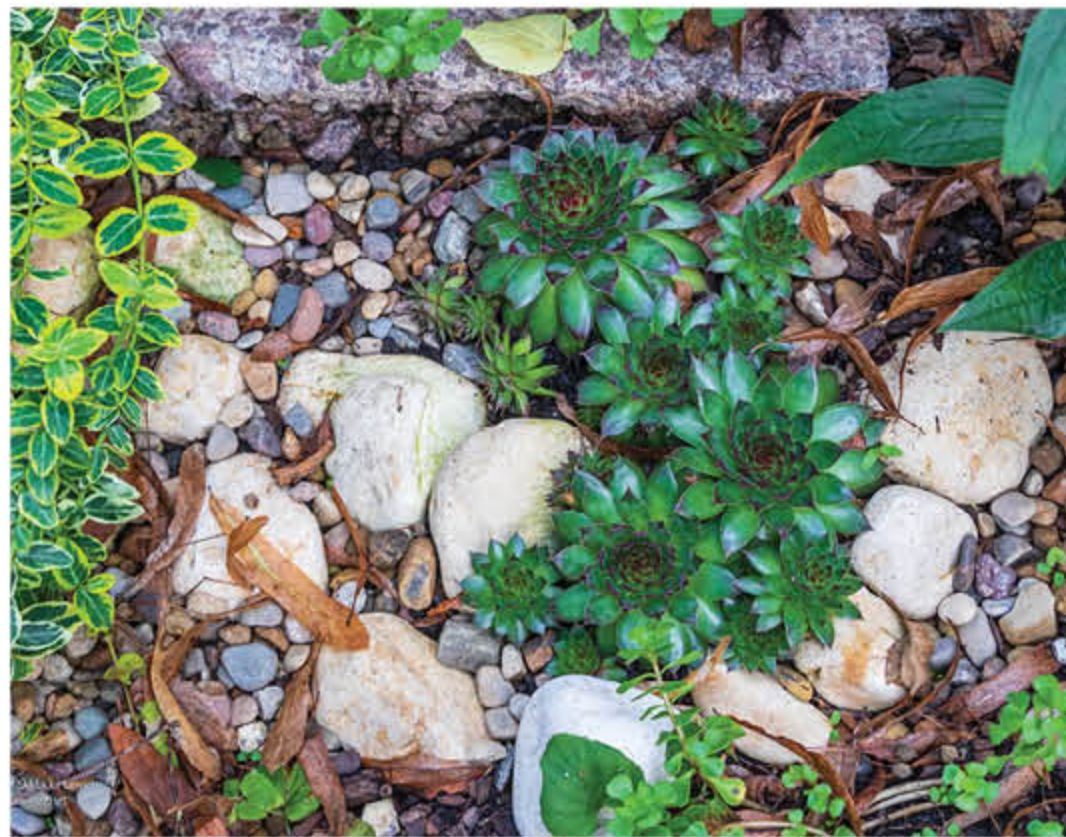
Summer Sun Splashes Across Native Redbud and Hydrangea



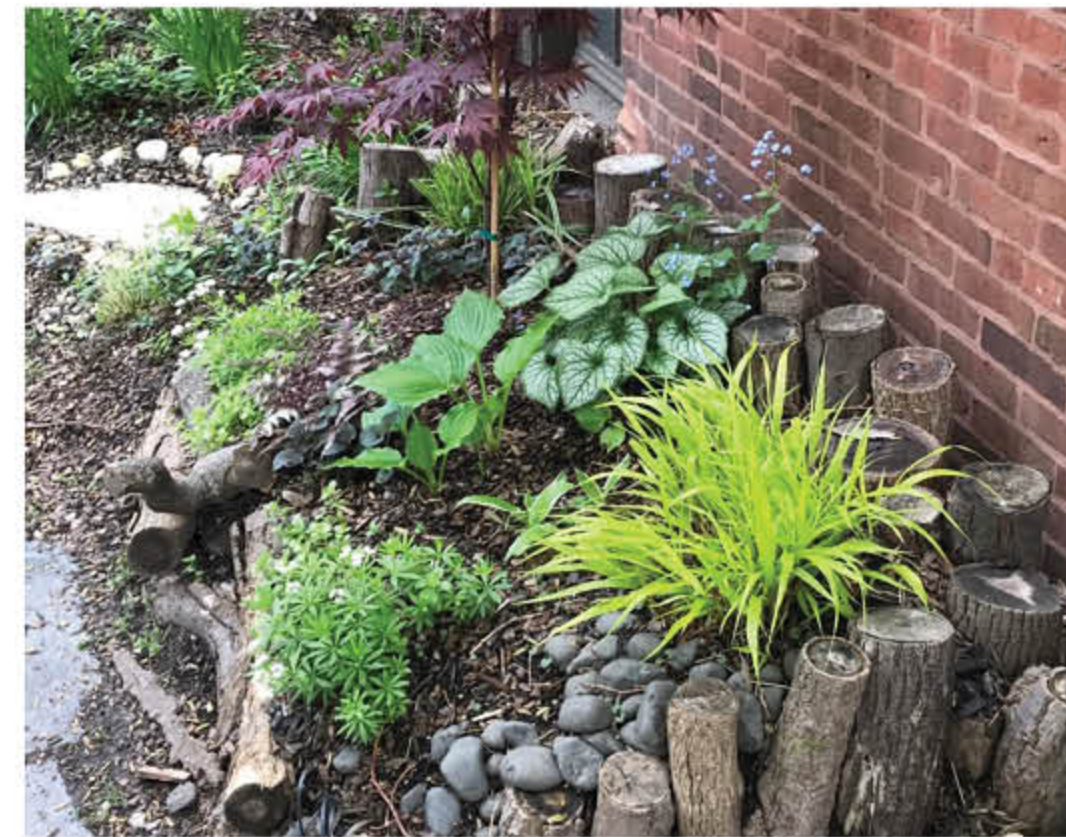
White Coneflower, Allium, Sedge, and Japanese Maple Establish Texture



Spring Ephemerals, Bleeding Hearts and Redbud Dot The Garden



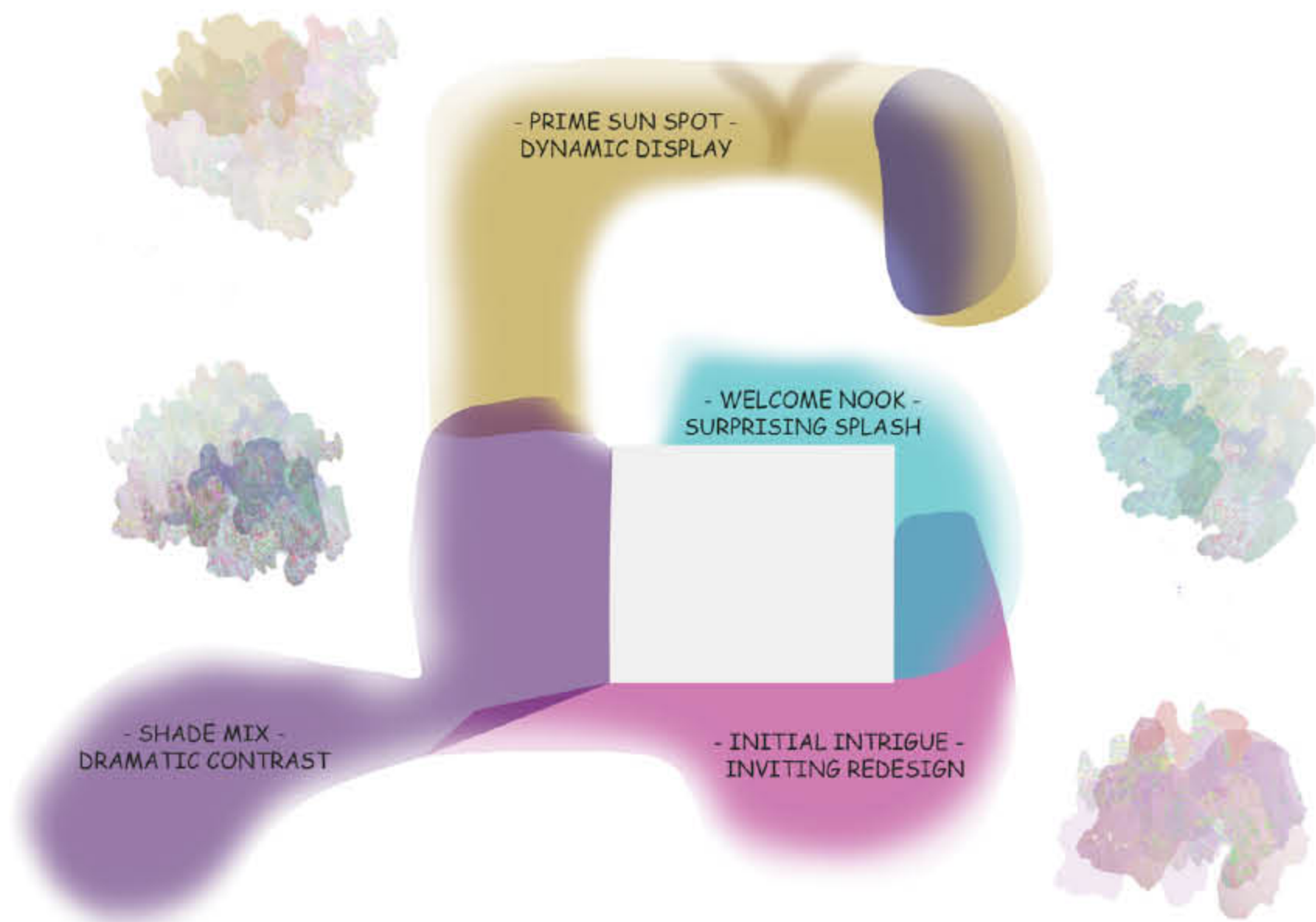
Hardy Perennial Succulents Add Rustic Touch to Rock Border



Sweet Woodruff and Japanese Sedge Define A Custom Built Log Bed



Native Columbine Emerges With Splashes of Reds Contrasting Pulmonaria



Plant	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Red chokeberry - max 6' - butterfly hot spot												
Vernal witchhazel - max 6' Slow grower - butterfly hot spot												
Winter berry holly - hardy variety												
Joe Pye Weed - butterfly hot spot - soft												
Golden Rod - butterfly hot spot - soft												
Giant Agastache - butterfly hot spot												
Deep Violet Hollyhock - butterfly hot spot - soft												

A Champaign, IL Homeowner's Dream Prioritizing Pollinators (Earth Mama Design)

A retiree grew tired of copious hostas overtaking all his planting beds after 40 years. His goals were to have the front and back yard of his property become inundated with color, butterflies, bees and birds.

Thousands of plants and bulbs later, many of which natives, this yard is seasonally teeming with dozens of native and migratory species including hummingbirds and lepidoptera like swallowtails and monarchs along with their larva. Redbud and cherry blossoms along with showy perennial sunflowers, jo pye weed and goldenrod bookend peak summer blooms of butterfly bush, cardinal flower, agastache, phlox and a variety of milkweeds.

Increased insect populations attract many song birds, greeting the client at all times of day, starting with a morning chorus throughout spring and summer.

In late autumn, native ground-nesting bees find habitat beneath untrimmed herbaceous material, a land management technique introduced by Earth Mama. Plan, color palette and perspectives made in Adobe Photoshop.



Revisiting A Backyard Chicago Plot Watery Wooded Edge Becomes Habitat (Earth Mama Design)

Space is tight in this narrow back yard strip, currently full of aggressive weeds and occasional fox. How will it ever serve pollinators and a private nature nook for a busy couple? Liminal space is transformed into a greenway for local wildlife.

A meandering berm adds new planting area, allowing native cultivars to successfully establish their territory. Meanwhile, the dimensionality of this built component fosters new, unique views seen from certain angles. As one moses the path, wood chips keep feet dry while simultaneously combatting weedy groundcovers.

Strong, deep root systems hold in place steep topography changes, initially anchored by groundcovers and modest mulch application.

Native violets take back the floor plane along with sweet woodruff and sedges in this wet environment near an urban creek, the entire site a sort of prime bioswale or woodland edge habitat.

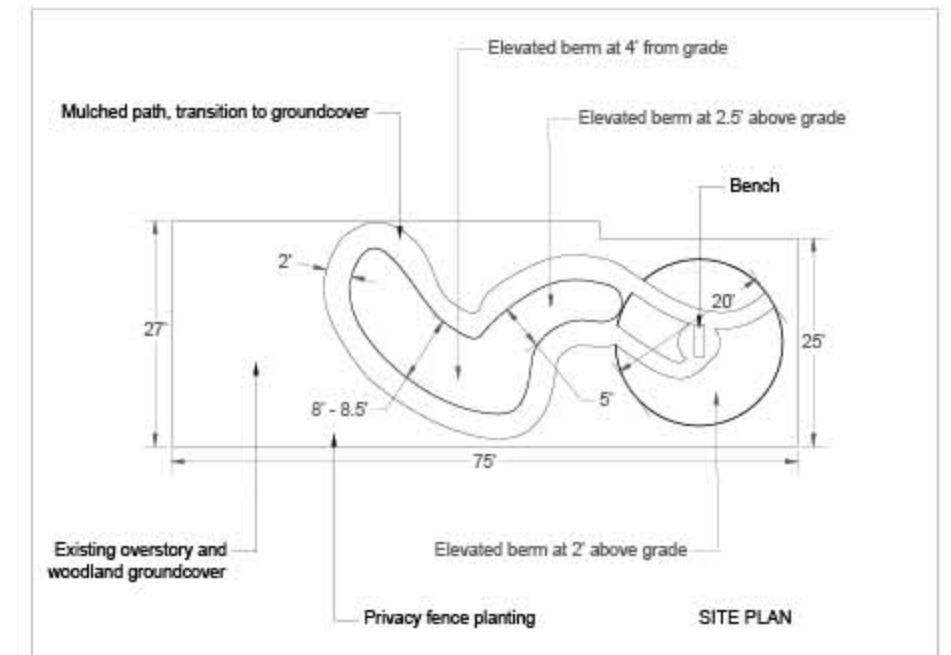
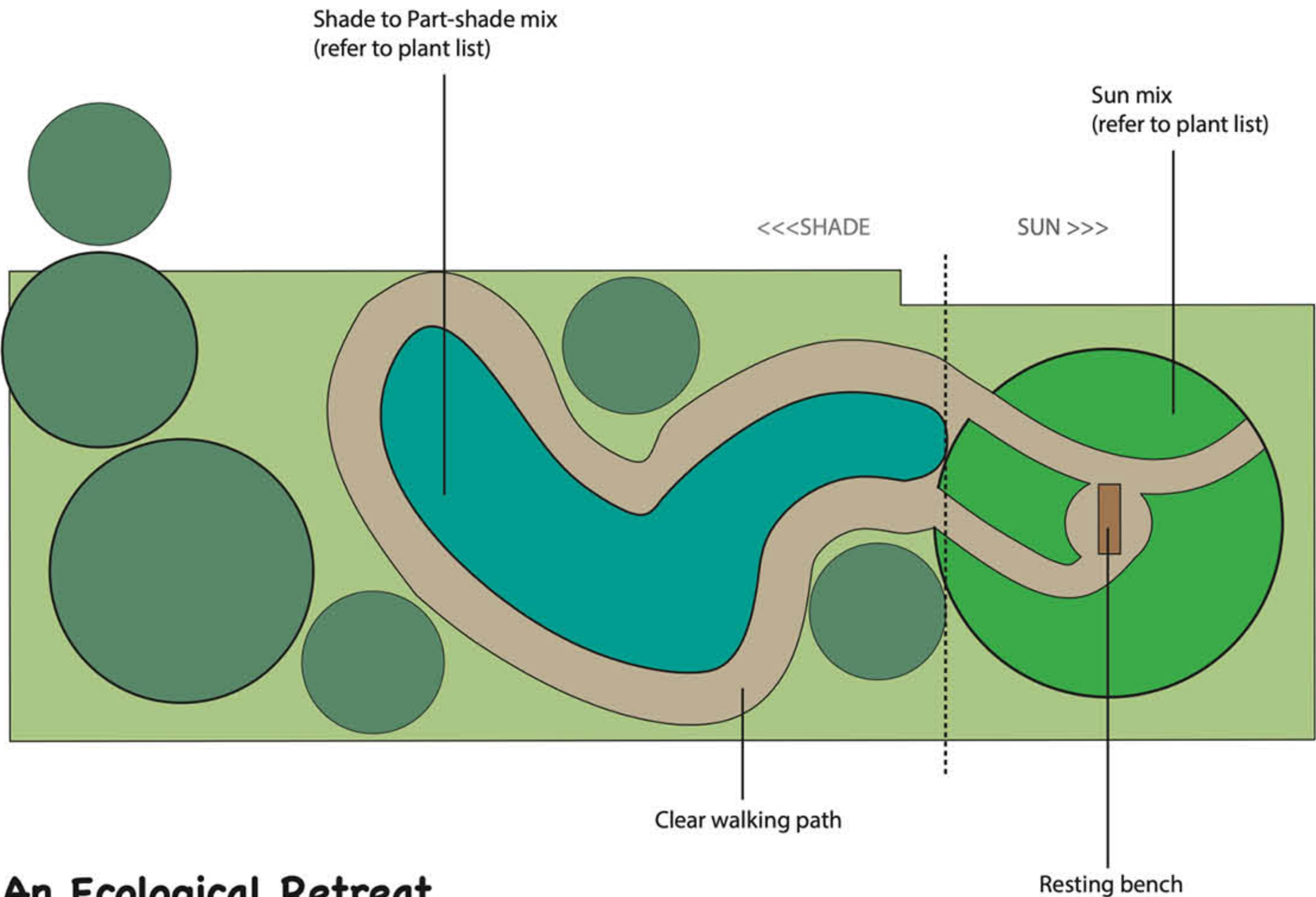
Across the northernmost point of site includes the highest and sunniest area within the garden, which gets transformed into a pollinators paradise, featuring queen of the prairie, butterfly weed, liatris and asters.

Native Virginia Creeper takes over the fence line, allowing native and migratory birds additional habitat and food replenishment.

Cascading across the entire landscape cascades native wild ginger, forming a woodland carpet dotted with bursts of sweet woodruff and sprouts woodland asters.



COMMON NAME	NAME	SEASON / MONTHS	COLOR	LAYER	HEIGHT / WIDTH	SUN PREFERENCE	NOTES
MAPLE LEAF VIBURNUM	<i>Viburnum acerifolium</i>	SMALL FLOWER IN JUNE, SEPTEMBER LEAF COLOR	WHITE FLOWER; ORANGES AND REDS IN AUTUMN LEAVES	SHRUB	H - 6' ; W - 4' H - 5' / W - RUNNER	SUN TO SHADE	
VIRGINIA CREEPER	<i>Parthenocissus quinquefolia</i>	OCTOBER - NOVEMBER	REDS AND BURGENDY	GROUND COVER	H - 4' ; W - SPREADING	SUN TO FULL SHADE	It is a good food source for several species of birds. This shrub is native to the eastern U.S. and a good plant for naturalizing in open woodlands or used to stabilize steep slopes because of its suckering habit.
CORALBERRY	<i>Symphoricarpos orbiculatus</i>	SEPTEMBER - NOVEMBER	PURPLE RED FRUITS IN FALL	SHRUB	H - 4' ; W - SPREADING	FULL SUN / PART SUN / SHADE	
CONE FLOWERS	<i>Echinacea purpurea</i>	JUNE - AUGUST (SUMMER - EARLY AUTUMN)	PURPLE, MANY OPTIONS	HERBACIOUS	H - 3' ; W - 2'	SUN	
JO PYE WEED	<i>Eutrochium fistulosum</i>	JULY - SEPT (SUMMER - EARLY AUTUMN)	MAUVE PINK	HERBACIOUS	H - 3' ; W - 3'	FULL SUN TO PARTIAL SHADE	
QUEEN OF THE PRAIRIE	<i>Filipendula rubra</i>	MAY - JULY (SUMMER)	BRIGHT ROSE PINK	SHRUB	H - 6' ; W - 3'	FULL SUN TO PART SHADE	
SWEET WOODRUFF	<i>Galium odoratum</i>	APRIL - MAY (SPRING)		GROUND COVER	H - 1' ; W - 1.5' RUNNER	SHADE TO PART SHADE	EXCELLENT FOR VARIETY OF BENEFICIAL INSECTS
WILD GINGER	<i>Asarum canadense</i>	APRIL - SEPTEMBER	GREEN WITH BROWN FLOWER	GROUND COVER	H - 5' ; W - RUNNER	SHADE TO PART SHADE	NATIVE GROUNDCOVER
BUTTERFLY WEED	<i>Asclepias Tuberosa</i>	JUNE - AUGUST	ORANGE	HERBACIOUS	H - 2' ; W - 2'	SUN / PART SHADE	a well-known magnet for butterflies, Butterfly Weed prefers fast-draining, BIG BUTTERFLY HOST PLANT, SLIGHTLY STAGGERED PERFORMANCE WITH OTHER ASCLEPIAS
SWAMP MILKWEED	<i>Asclepias incarnata</i>	AUG - SEPT (EARLY AUTUMN)	ROSE PINK	HERBACIOUS	H - 4' ; W - 3'	FULL SUN / PARTIAL SHADE	PIZZOS, ESTABLISHES SLOWLY, BIG BUTTERFLY PLANT; LOW WATER
LEAD PLANT	<i>Amorpha canescens</i>	JUNE - AUG (SUMMER - EARLY AUTUMN)	PURPLE WITH ORANGE ANTERS	HERBACIOUS	H - 2' ; W - 2.5'	FULL SUN	
PRAIRIE MILKWEED	<i>Asclepias sullivantii</i>	JUNE - AUG (SUMMER - EARLY AUTUMN)	ROSE PINK	HERBACIOUS	H - 3' ; 2.5' W	FULL SUN	FRAGRANT
WOOD SEDGE	<i>Carex blanda</i>	MARCH - JUNE (SPRING - SUMMER)	GREEN TO BROWN	GROUND COVER	H - 2' ; W - 2'	PART SHADE OT PART SUN	IMPORTANT FOOD SOURCE FOR MAMMALS, INSECTS AND BIRDS; RAIN GARDEN COMPATIBLE; GREAT FOR GROUND COVER POTENTIAL IN WOODLAND GARDENS; EROSION CONTROL ON BERM; BIRDS AND SQUIRRELS EAT SEEDS
PURPLE PRAIRIE CLOVER	<i>Dalea purpurea</i>	JUNE - SEPT (SUMMER - EARLY AUTUMN)	PURPLE LONG CLUSTERS WITH ORANGE ACCENTS	HERBACIOUS	H - 2' ; 1.5' WIDE	FULL SUN	ARVAL HOST PLANT FOR POLLINATORS AND BEES AND BUTTERFLIES, READILY CONSUMED BY RABBITS
FLAT TOPED WHITE ASTER	<i>Doellingeria umbellata</i>	JUNE - SEPT (SUMMER - EARLY AUTUMN)	WHITE	SHRUB	H - 5' ; W - 2'	PSUN - SUN	ATTRACT VARIETY OF BUTTERFLIES AND BEES
MIDLAND SHOOTING STAR	<i>Dodecatheon meadia</i>	APRIL - JUNE (SPRING TO MID SUMMER)	WHITE/LAVENDER	HERBACIOUS	H - 1' ; W - 1'	BEST IN PARTIAL SHADE	BUMBLEBEES FAVOR THE POLLEN; WITHERS AND DORMANTS TOWARD HEAT OF SUMMER; MOIST TO SLIGHTLY DRY LOAMY SOILS



EARTH MAMA DESIGN
SCALE: 1:100
N
SITE PLAN SUBJECT TO CHANGE INCLUDING IN-FIELD DESIGN DECISIONS ACCOMMODATING EXISTING PLANT MATERIAL AND STRUCTURES
By Tonie Andriana
Sharon Ostrowski
10223 S Swaley Ave
Chicago, IL 60643
May 2022

An Ecological Retreat

OBJECTIVE: ESTABLISH A MANAGAEABLE, NATURAL SANCTUARY FOR WILDLIFE WITH LESS WEEDS AND MORE COLOR

SECTION 3:

Academic Experience

p 17 : Crystal Lake Park, Near Carle Hospital, Urbana, IL Public Space & Circulation Fuse Urban Retreat

p 18 - 19 : Downtown Champaign, IL Values, Grounded by Place

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p 22 - 23 : Endangered Species, Kankakee, IL Designing for Habitat & Conservation

p 24 : Garden Hills Neighborhood, Champaign, IL Designing for Access and Diversity

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p 26 : Site Analysis to Construction Water-Inspired Landscapes

p 27 : Texture & Modeling Iteration Multi Media Representation

p 28 : Construction Documents Design Details, Various Projects

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p 30 : Fruits of Culture, Champaign, IL Park Fragmentation Resolved, Growing Global Food



PLAN SECTION CUT



7 CHERRY

6 PEACH

4 ECHINACEA

2 DAY LILLY + HOSTA

5 CANADIAN YEW

MULTIFUNCTIONAL POLYCULTURE

7. OVERSTORY

6. UNDERSTORY

5. SHRUB

4. HERBACEOUS

3. GROUND COVER

2. RHIZOME

1. VINE

7 EXISTING CANOPY

6 REDBUD

5 RED TWIG DOGWOOD

4 GOLDENROD

5 GOOSEBERRY + CURRANT

1 WISTERIA + MORNING GLORY

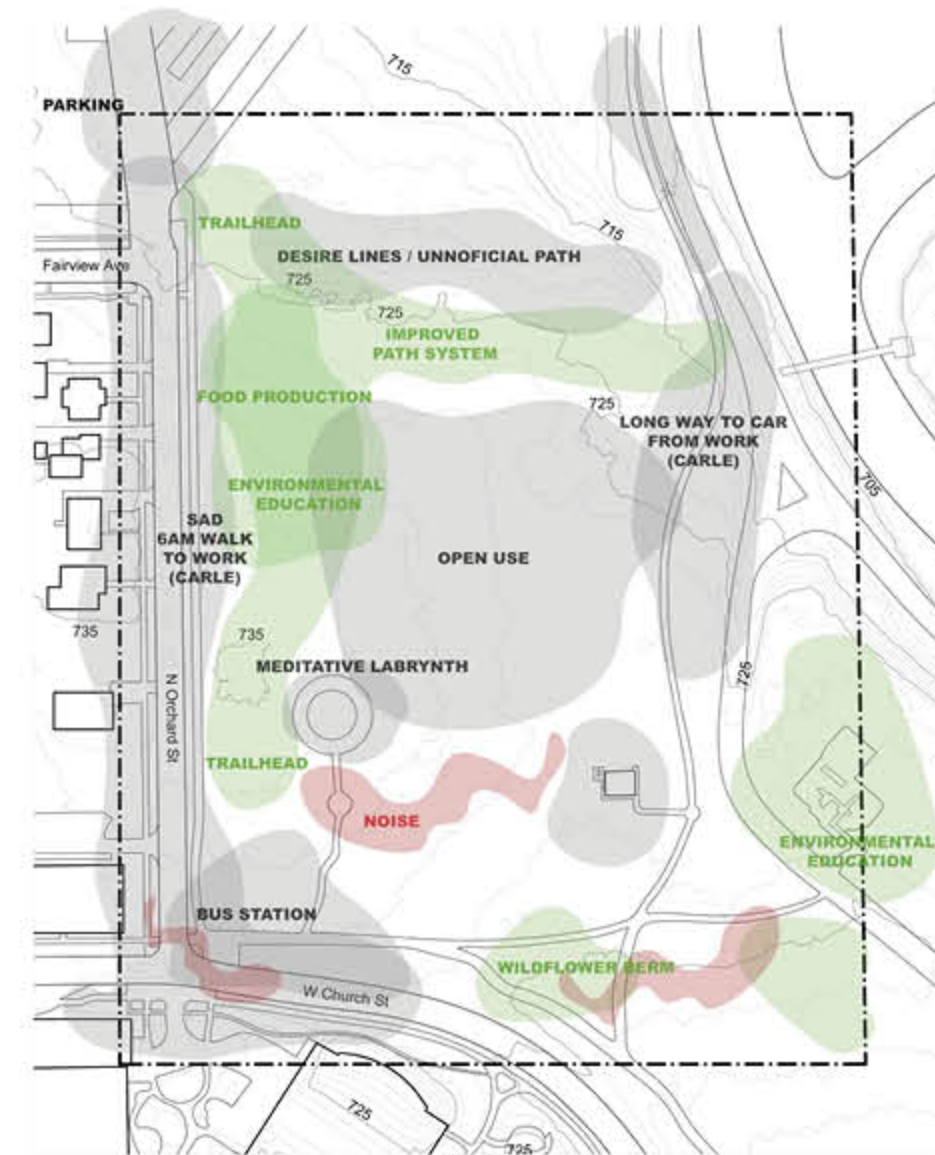
3 SEDGE



Design Intervention - Berms elevate user experience both above and below while adding to four season interest in this dynamic, multifunctional public space. Food producing plants increase fresh food options for residents and visitors while wonderful curves, lush with vegetation evoke curiosity, reinforcing healthy lifestyle choices.

Crystal Lake Park, Near Carle Hospital, Urbana, IL Public Space & Circulation Fuse As Urban Retreat (Academic)

Located directly next to Carle hospital and a busy bus station, Crystal Lake Park is a highly transient space, largely used for getting to one place from another. Design intervention includes an elevated path system introducing nooks for relaxation and new views, delightfully surprising at every turn. Whimsical spring blooms encompass the central path with a tree limb sculpted safety fence, disguised as art. Among the display, peach and cherry trees, increasing access to healthy food while encouraging physical activity, allowing hospital patients, visitors and staff a temporary retreat from worry in a naturalistic urban setting.



BUBBLE DIAGRAM

ADD KEEP / ALTER
SUBTRACT

CRYSTAL LAKE PARK
TONIA ANDREINA
3.15.21

Site Analysis - Addressing site specific challenges like a gloomy commute to and from work, or underuse by hospital patients, site analysis reveals user experience across space while proposing design interventions.

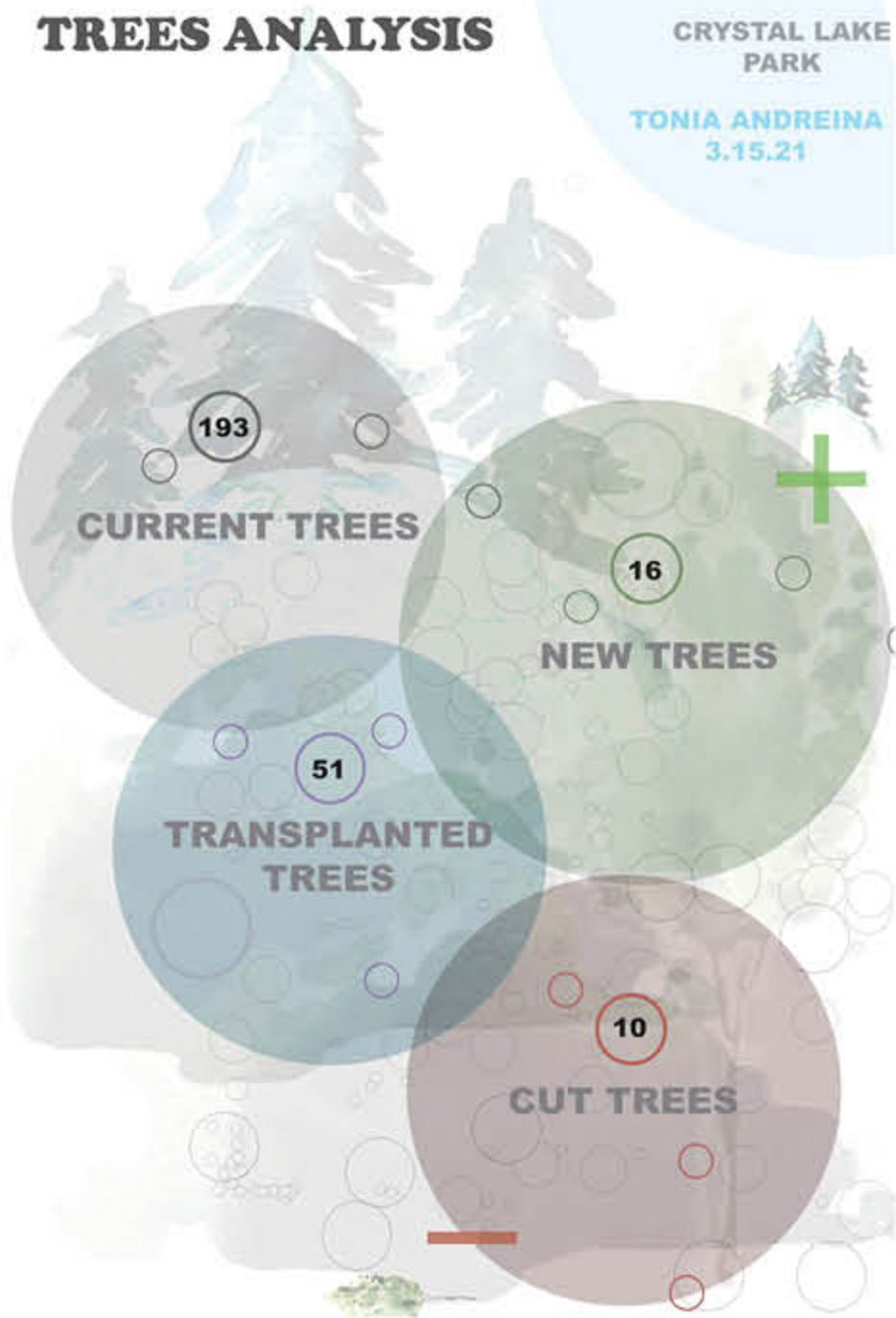


MULTIFUNCTIONAL POLYCULTURE

CRYSTAL LAKE PARK
TONIA ANDREINA
3.15.21

Design Intervention - A large, meandering berm system cascades along the landscape with a total 6' vertical elevation. Multifunctioning as a focal point in the landscape, a food production and circulation system, this pathway also is a part of site specific water management strategy.

TREES ANALYSIS



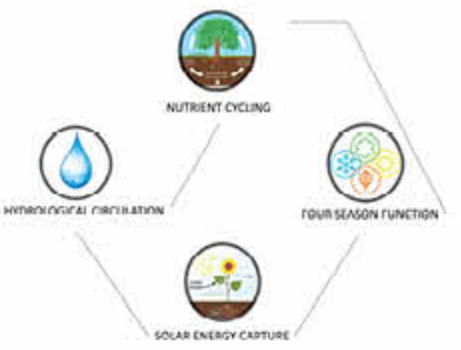
Design Implications - Overall the wooded site loses 10 trees, introducing 16, increasing species diversity and function on site. Some trees are transplanted, those deemed especially healthy but placed in spatial misalignment with site-specific stakeholder needs, keeping benefits.

“ ELEVATION “
A POST-COLONIAL CHAMPAIGN

TONIA ANDREINA | STUDIO - SITE DESIGN | 4.30.21



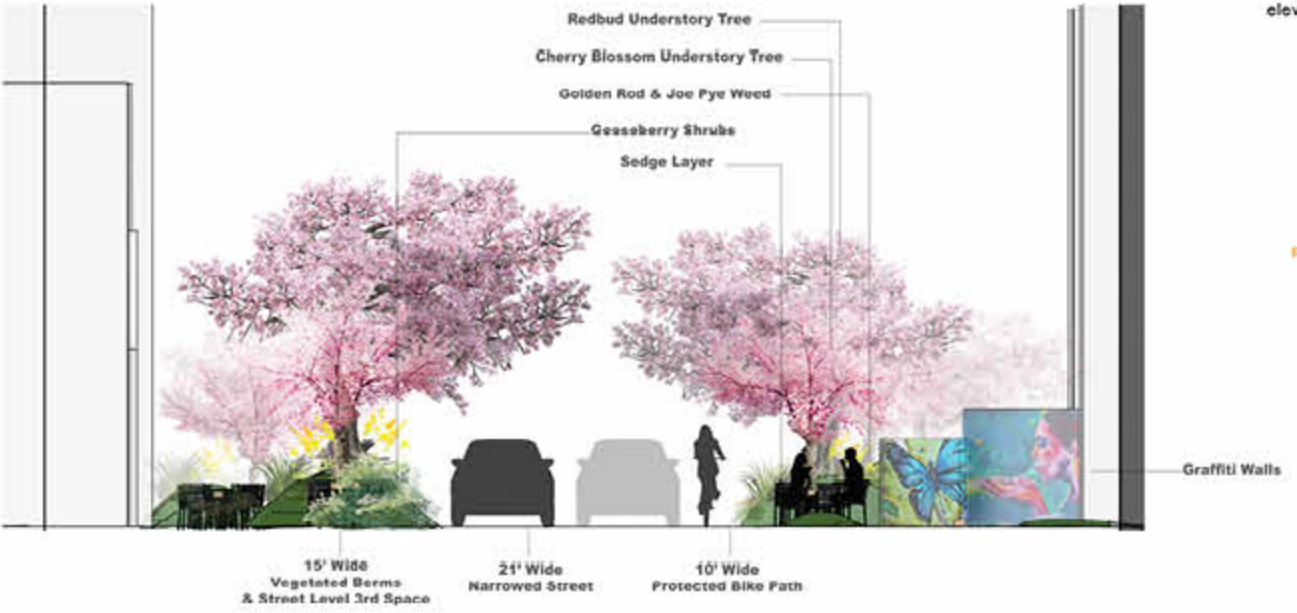
1. Includes multifunctional aspects in every major component, increasing cross-system synthesis.
2. Creates accessible 3rd space; stimulating community and economic development without homogenizing space.
3. Integrates and promotes natural systems; extending wildlife corridors, encouraging positive human relationship with the natural world.



SECTION, SOUTHERN GATEWAY



SECTION, WALNUT

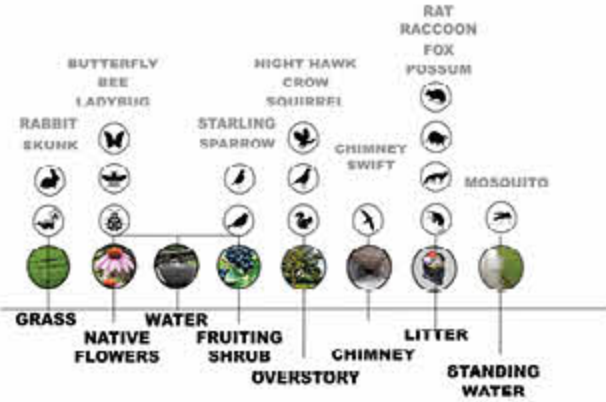


Since the dawn of Colonialism, certain groups of people have been cast aside to the fringes of society, causing a painful separation of state and citizen. Alongside systematic oppression of specific human audiences, Colonialism also exploits and diminishes Earth's natural systems.

"Elevate" offers Champaign government an opportunity to turn up the volume dial on critical aspects of local culture, spanning human and ecological borders. "Elevate" increases local community spirit, business development and a rich ecological foundation to meet and connect surrounding wildlife corridors. Through elevating what's already present and healthy in the community, Champaign boldly declares their own values as a modern, post-colonial form of government.



RUSTY PATCH BUMBLE BEE



“ ELEVATION “
A POST-COLONIAL CHAMPAIGN

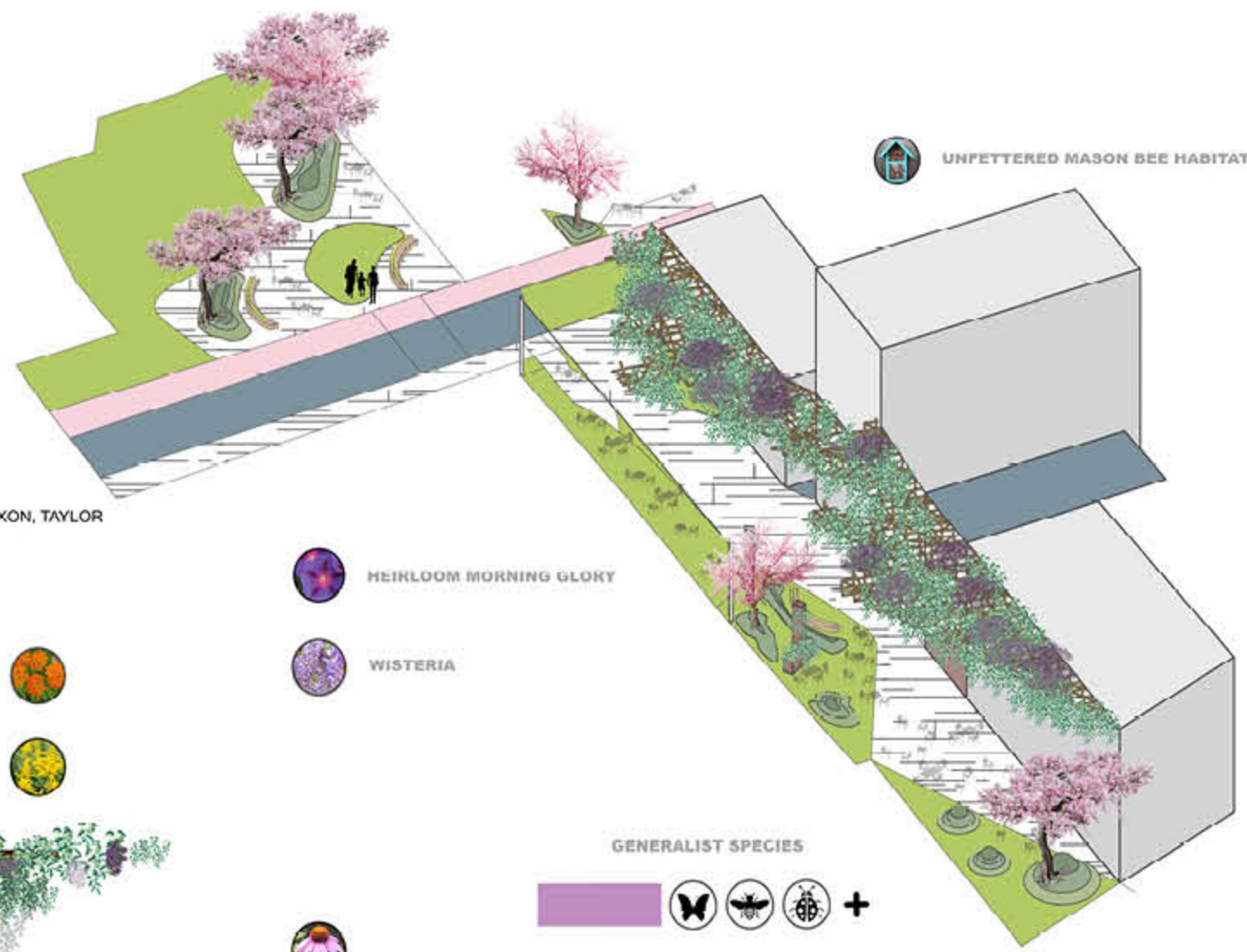
TONIA ANDREINA | STUDIO - SITE DESIGN | 4.30.21



PERSPECTIVE, CENTRAL CHESTER



- BUTTERFLY WEED
- GOLDEN ROD



AXON, TAYLOR

- HEIRLOOM MORNING GLORY
- WISTERIA



ECHINACEA



PERSPECTIVE, TAYLOR

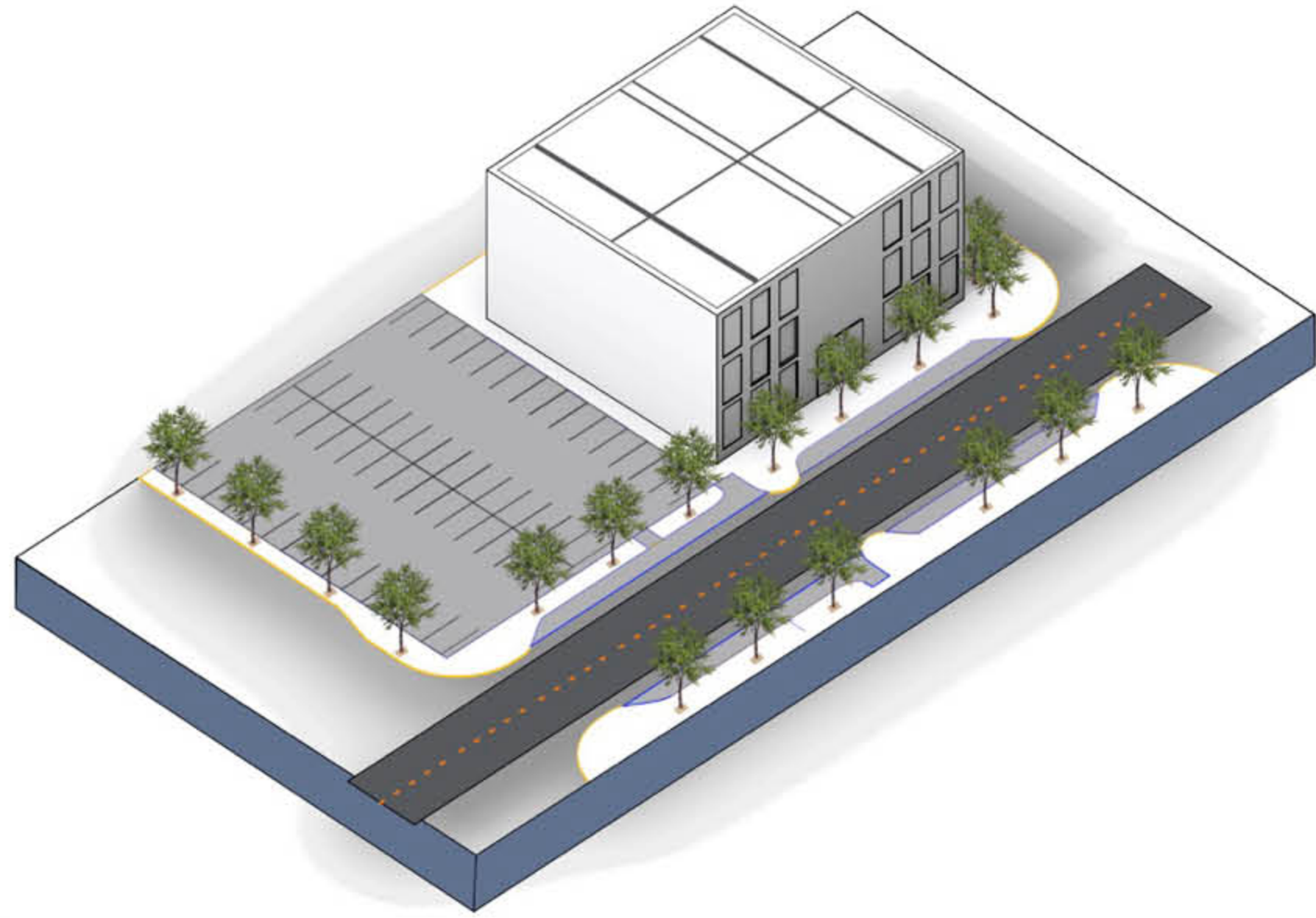


RUSTY PATCH BUMBLE BEE

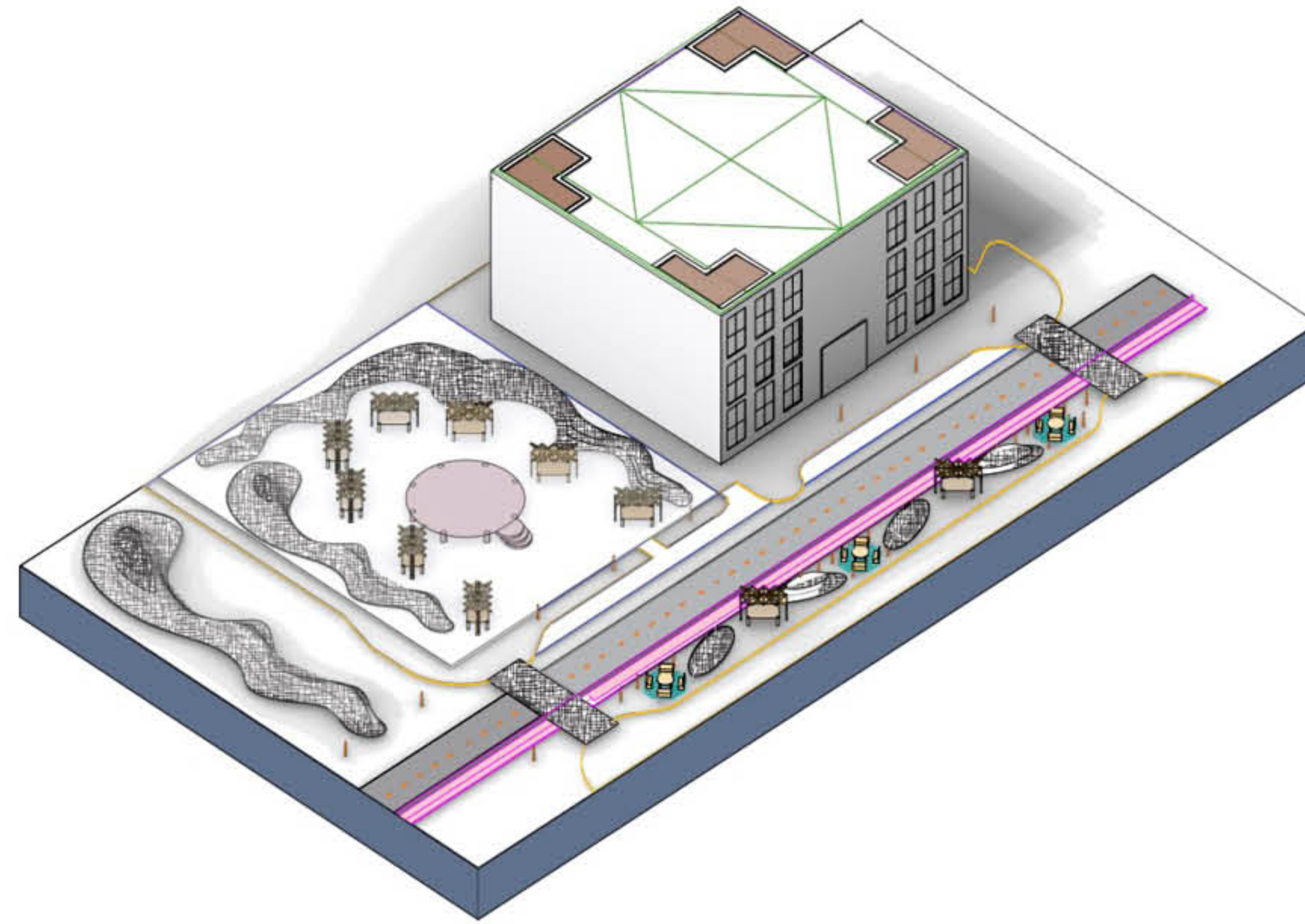
Downtown Champaign, IL
Values, Grounded by Place (Academic)

Downtown Champaign has a rich social fabric, but does the landscape reflect what blossoms inside shop doors along main street? Elevation, a post-colonial Champaign seeks to enhance present economic vitality, while addressing local performance space and temporary shelter in a planted geodesic dome with embedded sprinkler system for periodic deep cleaning. Plant selection and associated passive maintenance supports four season interest and habitat for pollinators such as the endangered Rusty Patch Bumble Bee. Plan, sections and axons are made in Rhino 3D modeling, finished in Adobe Illustrator.

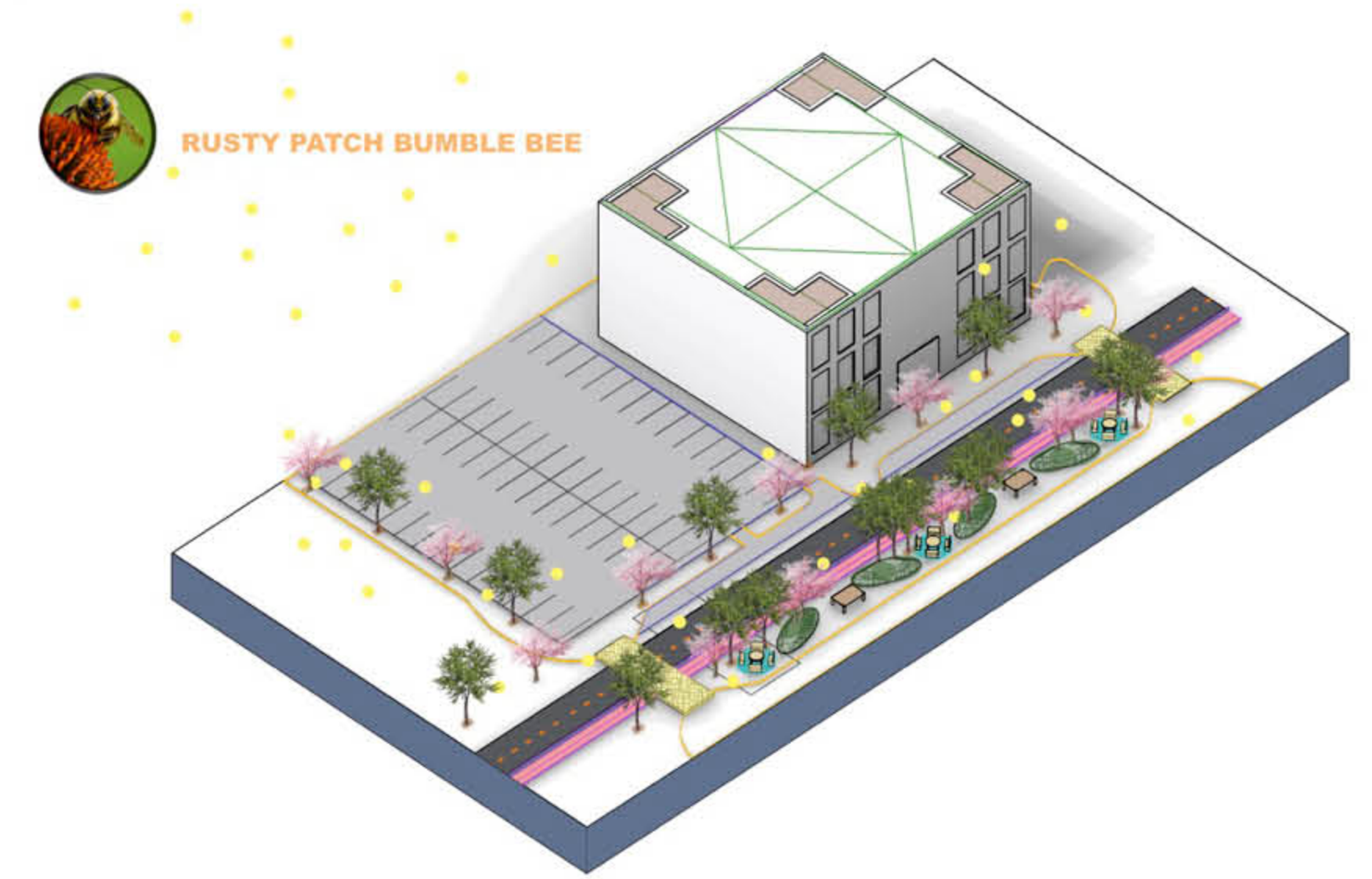
Design Intervention - Tree Introduction



Design Intervention - Plaza, Berm & Circulation



Design Intervention & Planting

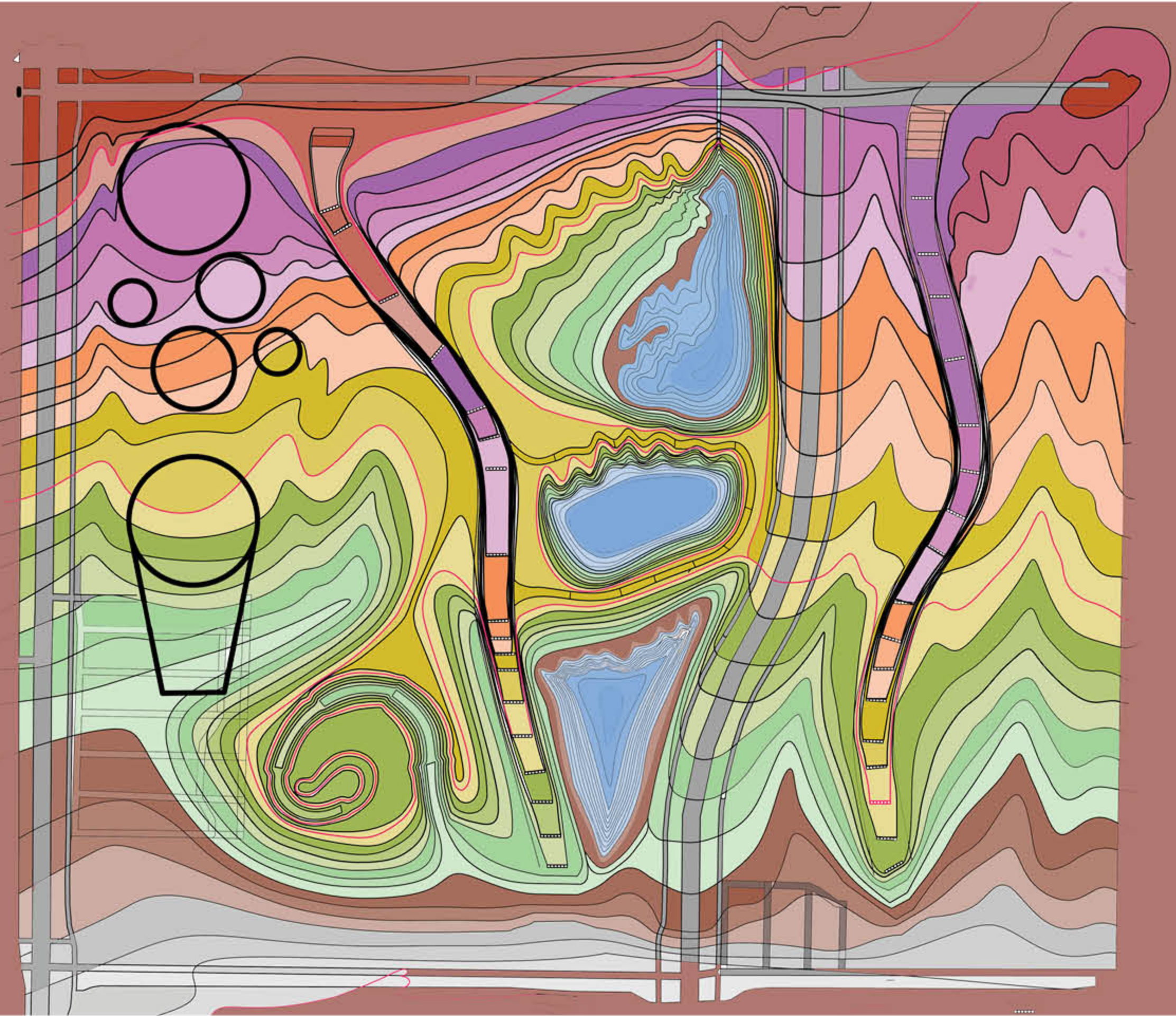


Downtown Champaign, IL Values, Grounded by Place (Academic)

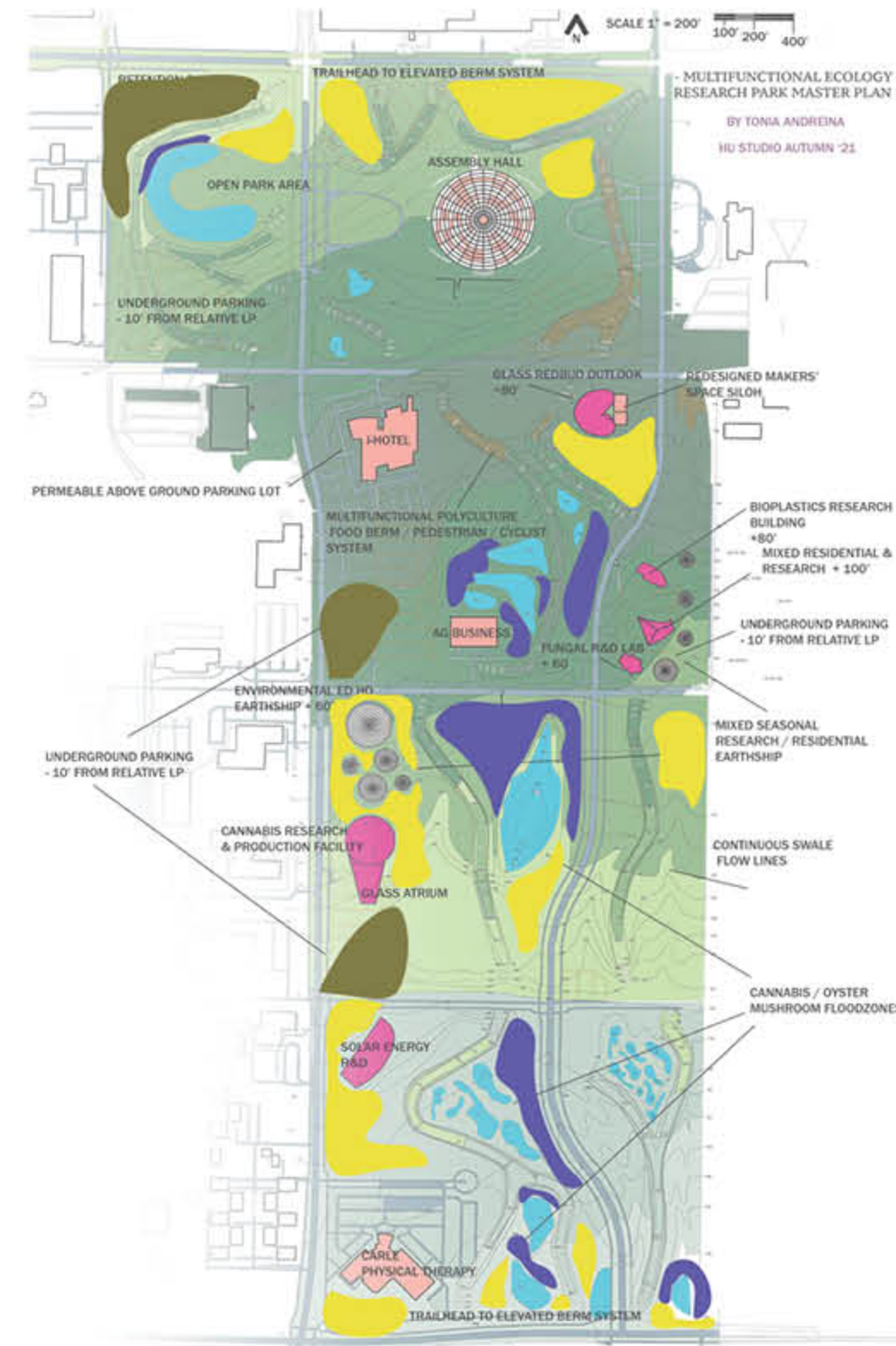
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Research Park, Urbana, IL Ecologically-Informed Design (Academic)

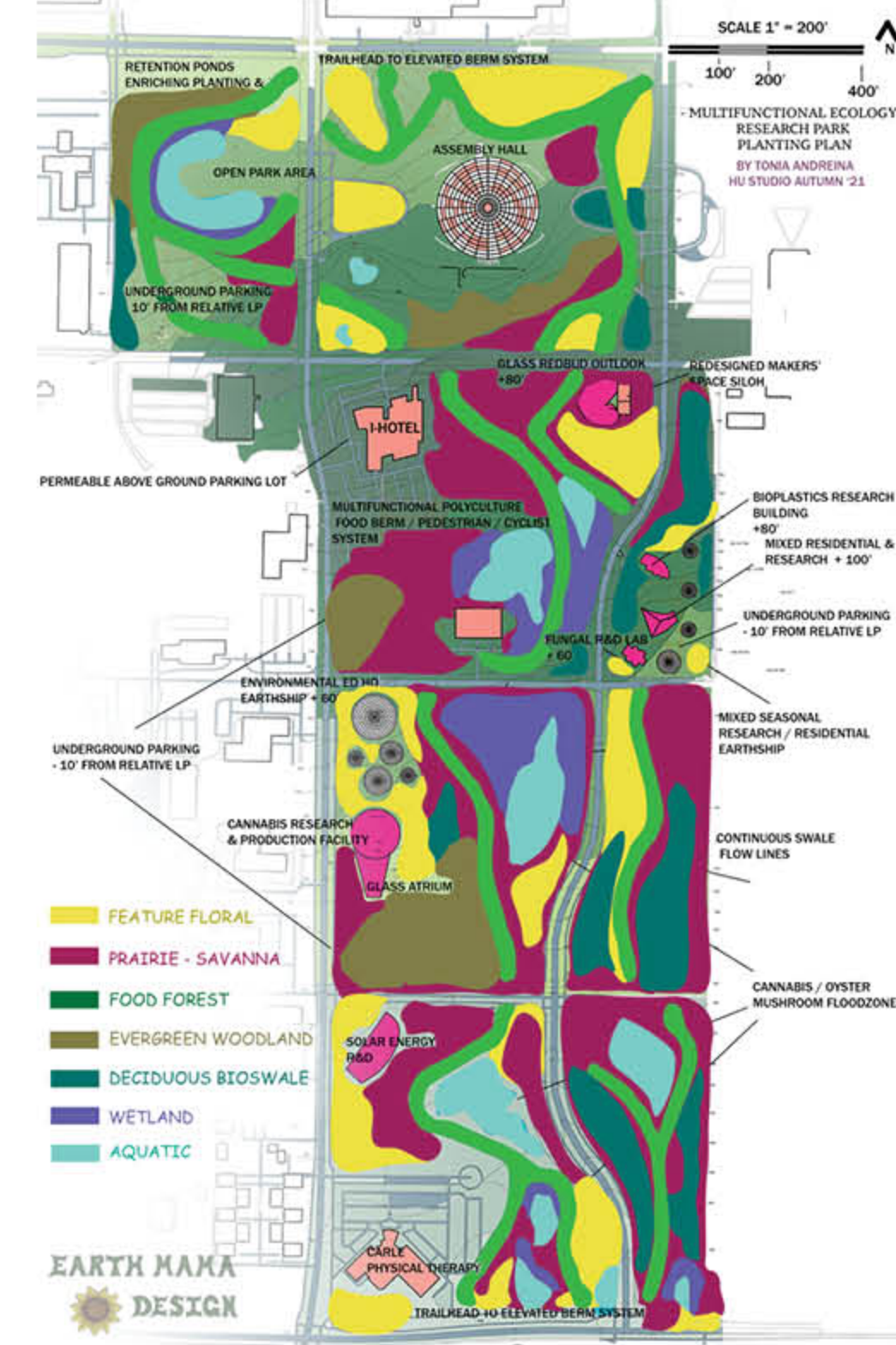
Designated research space contained in buildings finds its way into surrounding landscape, currently lacking in cohesion and utilization. Analysis of existing water flow and plant species on site inspire the final planting plan, along with contour transformations done in AutoCAD, managing flooding issues. Redefined topography includes an elevated walk way through the entire length of the park, complete with dappled tree canopy and seasonal displays, small lakes become an all year viewing opportunity for walkers, runners and lounging families alike. The bermed walkway multi-functions as a natural boundary for existing horses on site. An elevated mound with an ADA accessible sloped path highlights native species, grouped by seasonal reveal and color, creating a ground plane medicine wheel of Native American culture, honoring the sites history and four directions.



Design Intervention - Topography is Altered Introducing Swales and an Elevated Berm for Increased Water Management, Circulation and Views



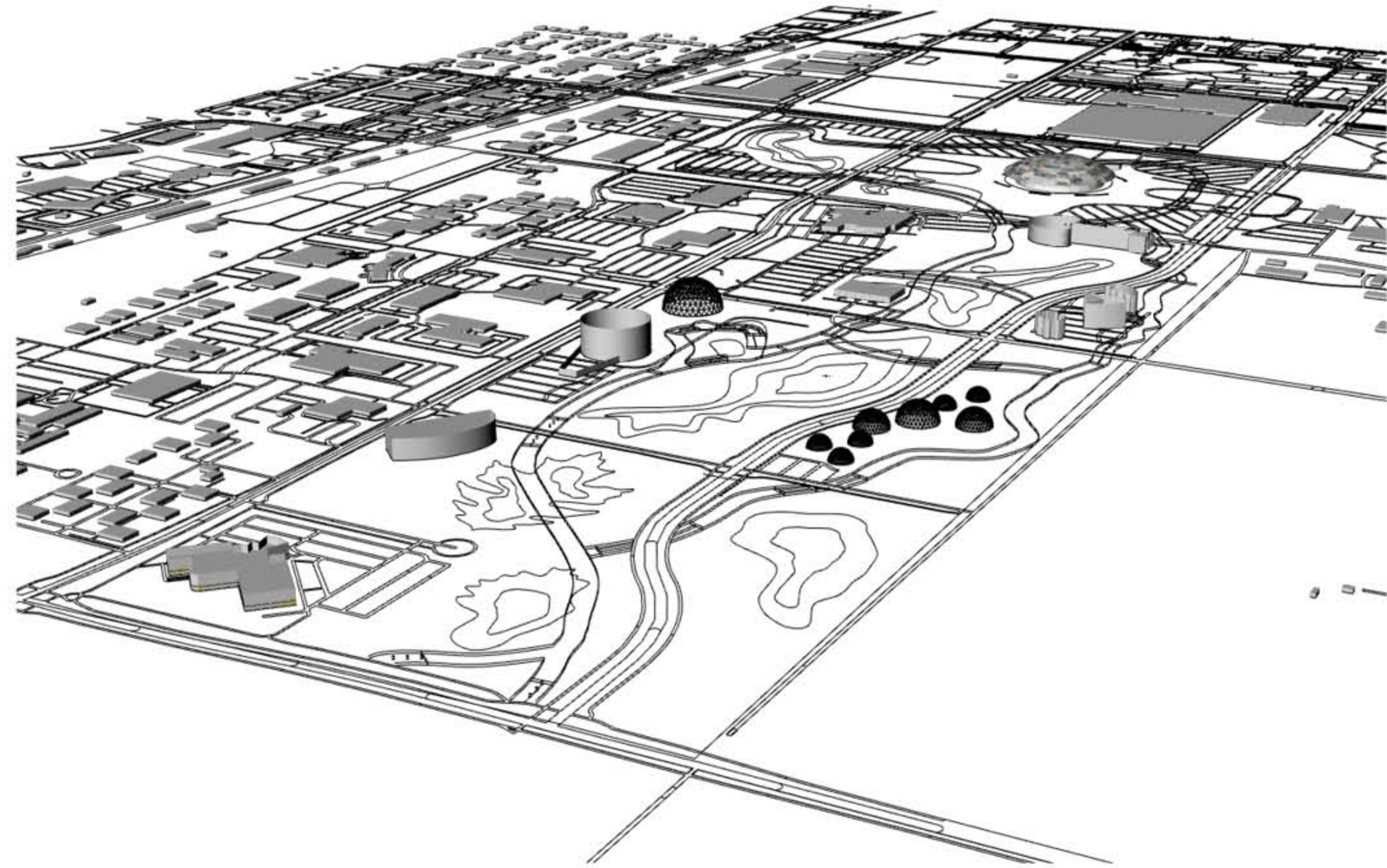
Design Intervention - Zones are Identified for Land Use



Planting Plan is Inspired by Nuanced Ecological Appropriateness

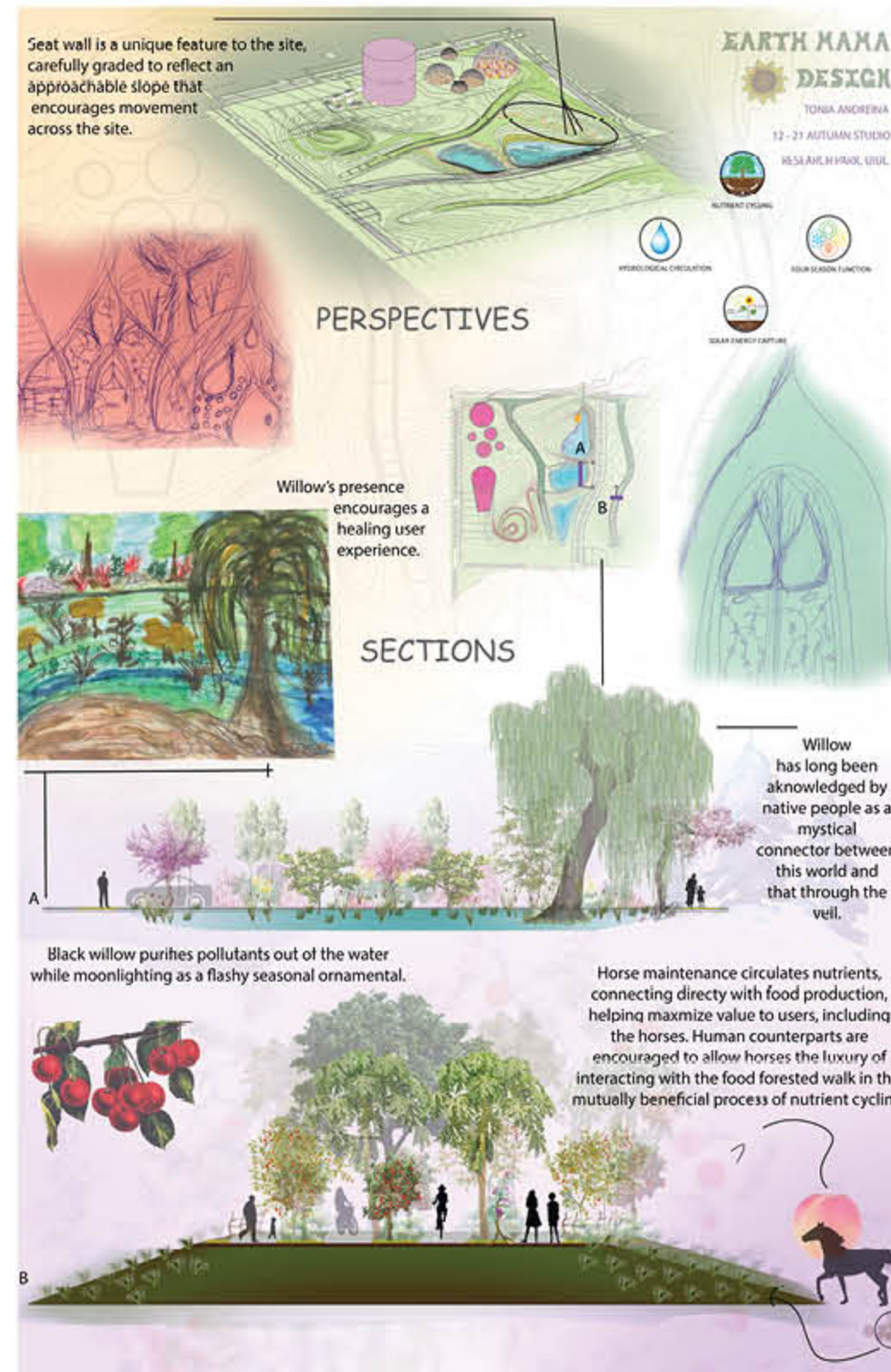


Planting Plan Reflects Ecological Function Across Site



Research Park, Urbana, IL Ecologically-Informed Design (Academic)

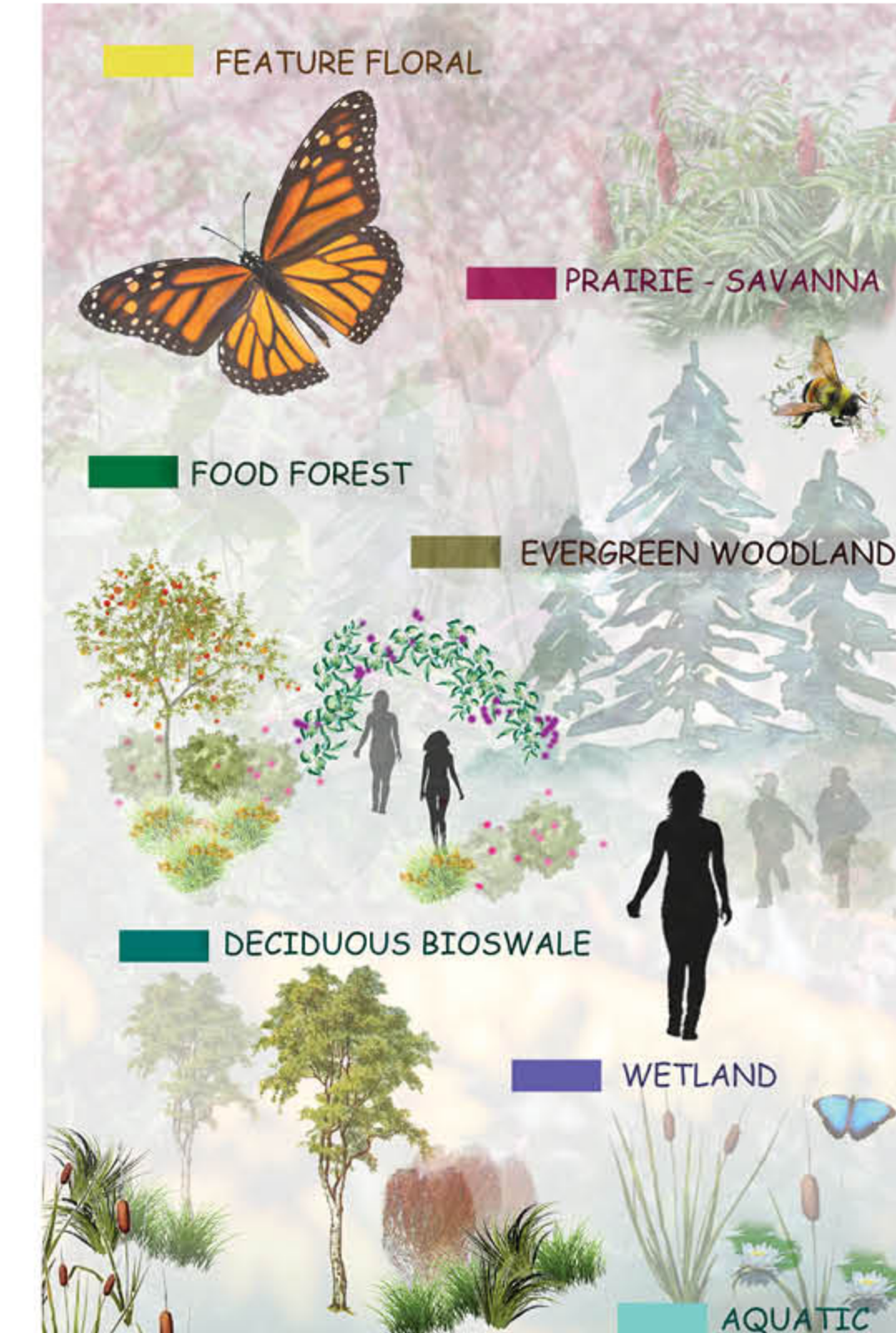
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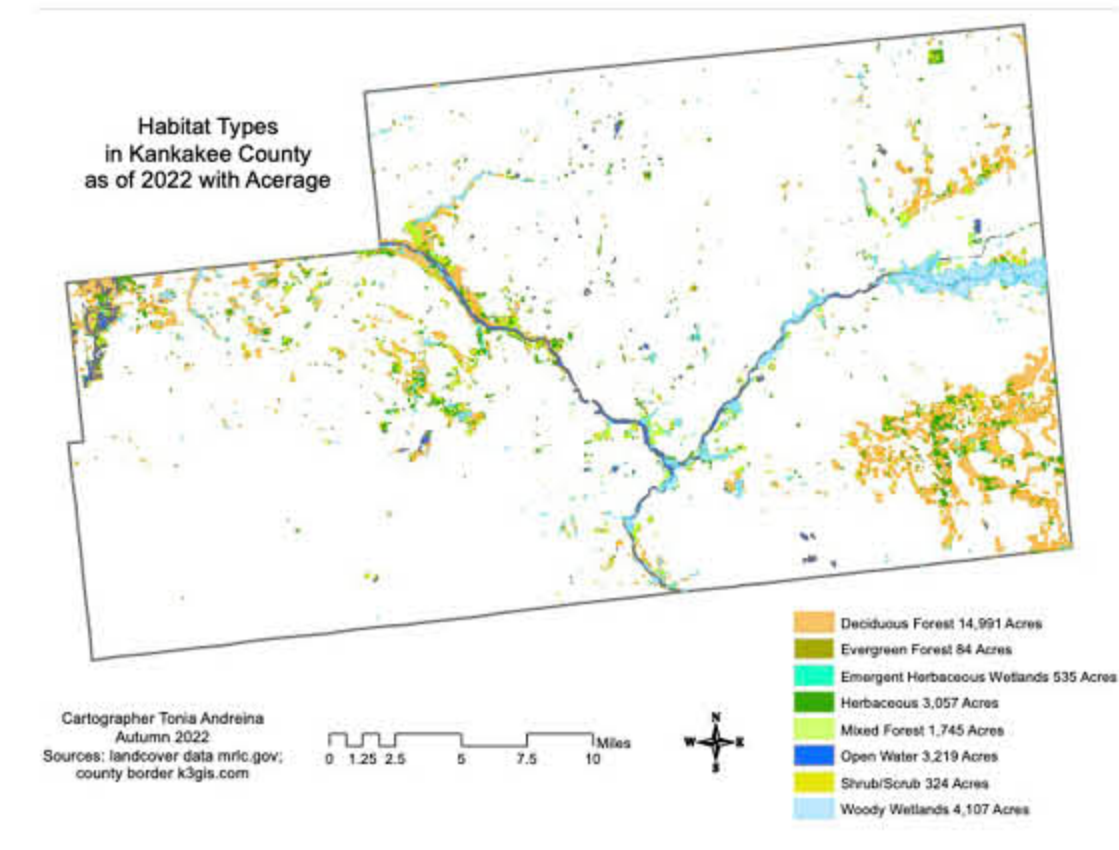
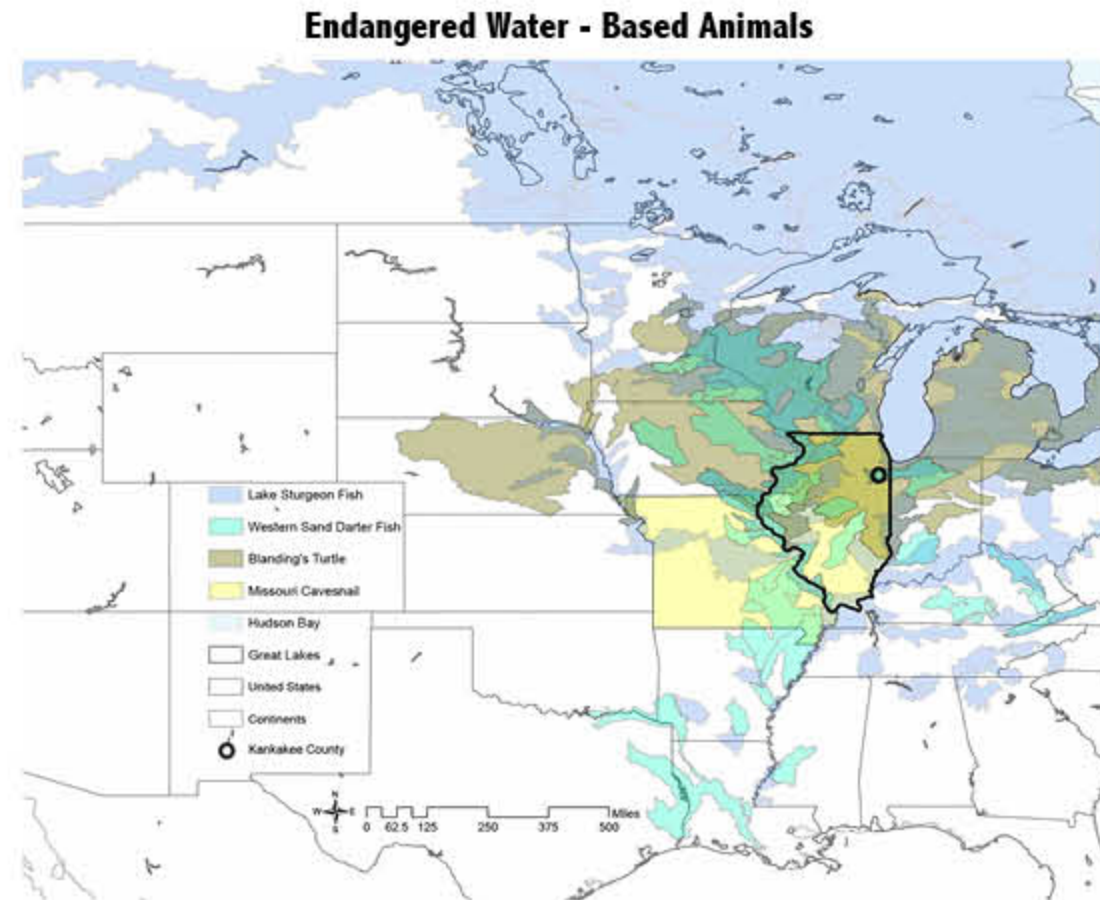
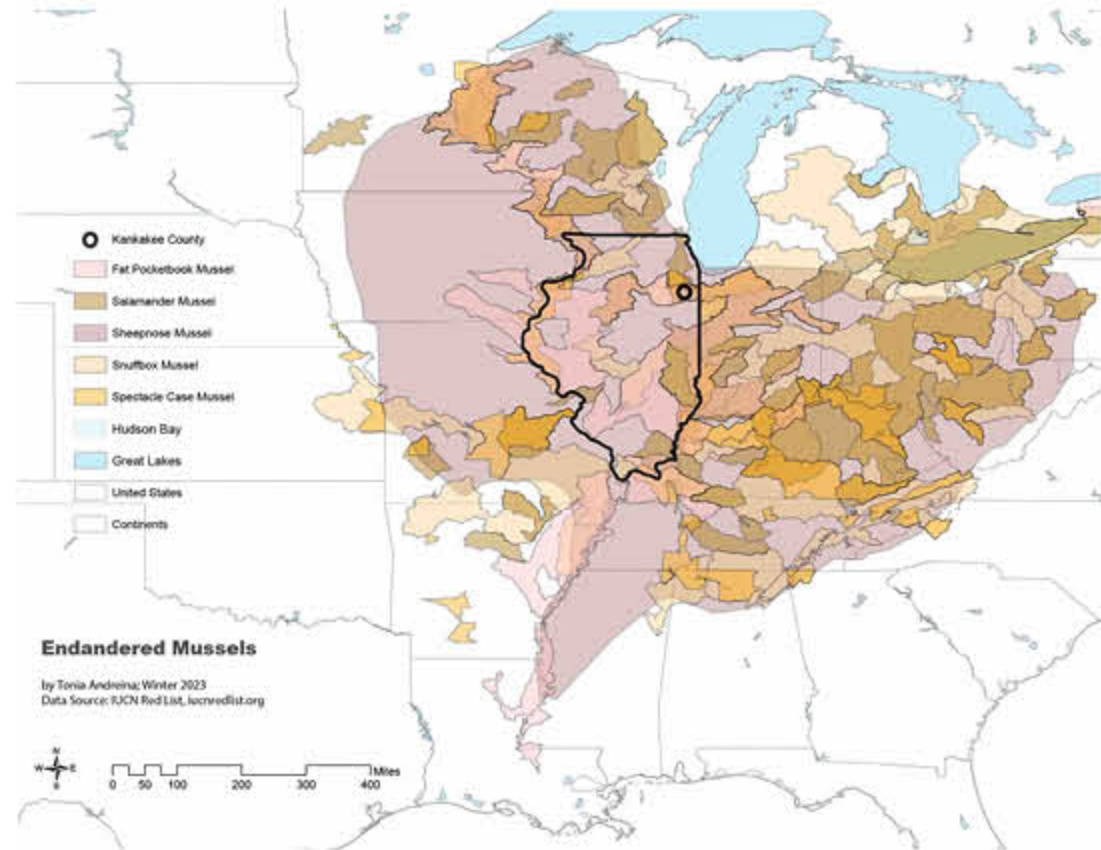
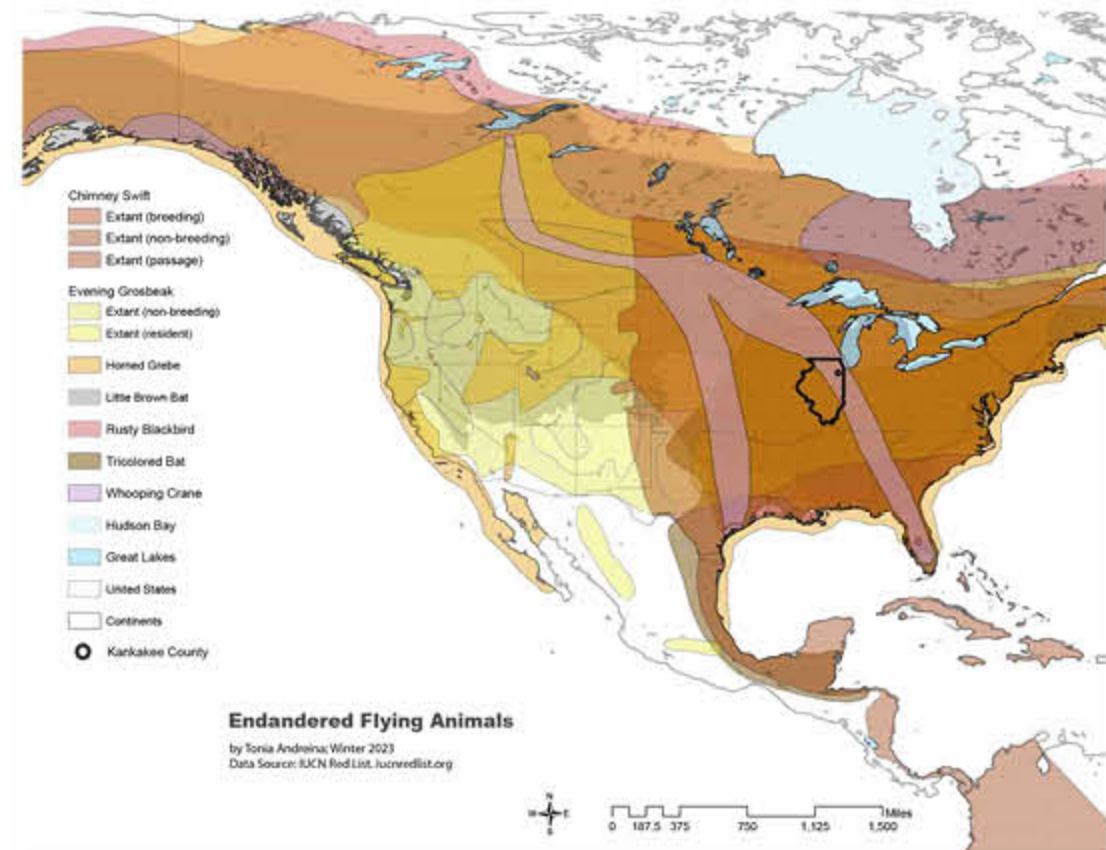
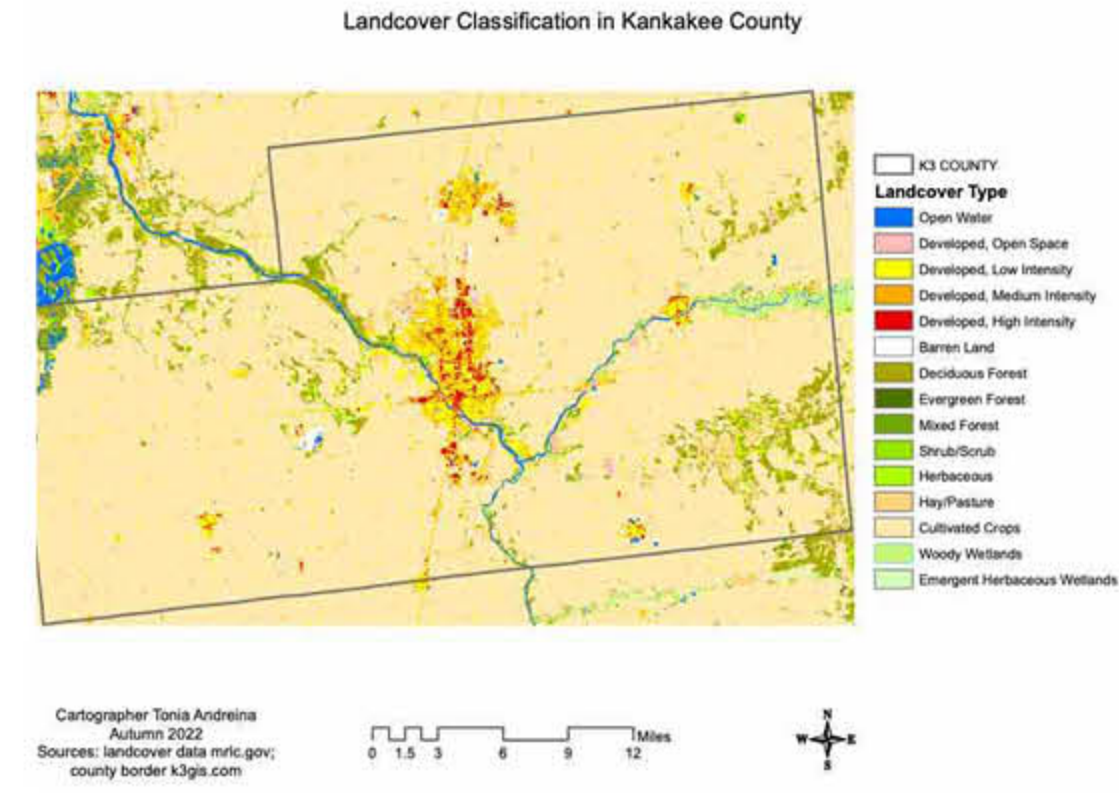
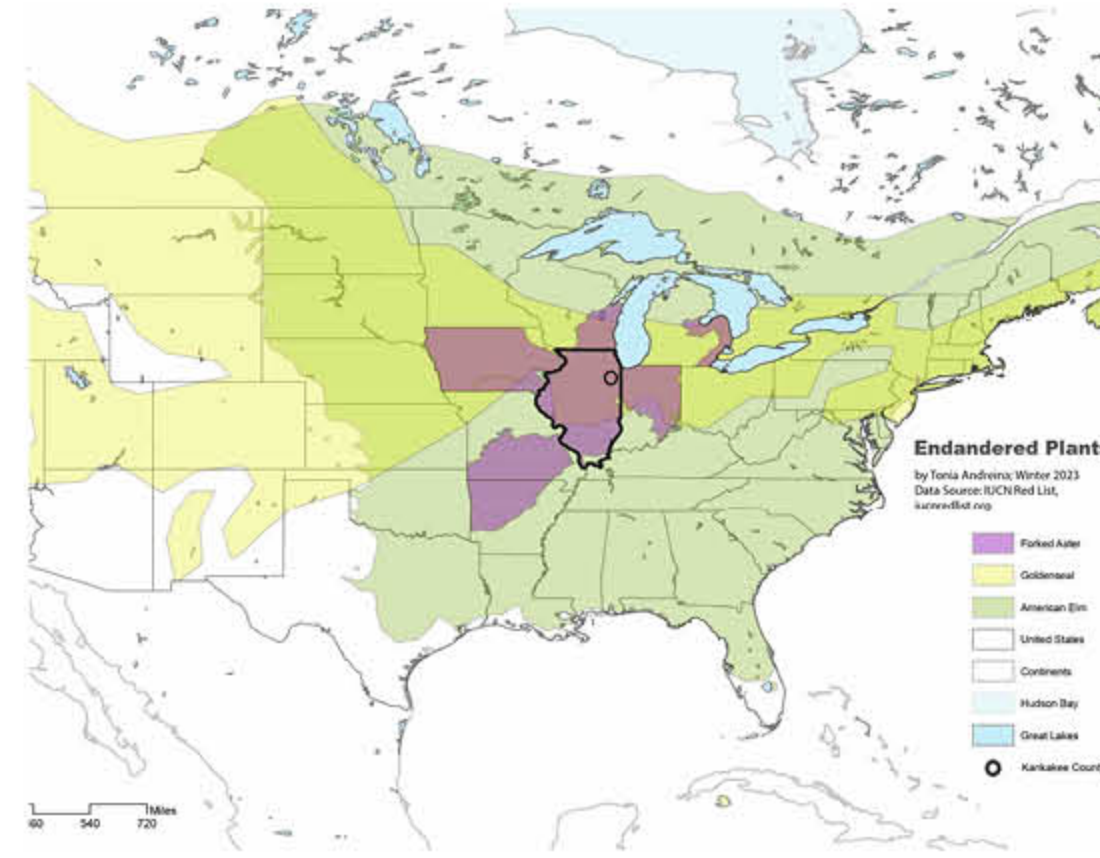
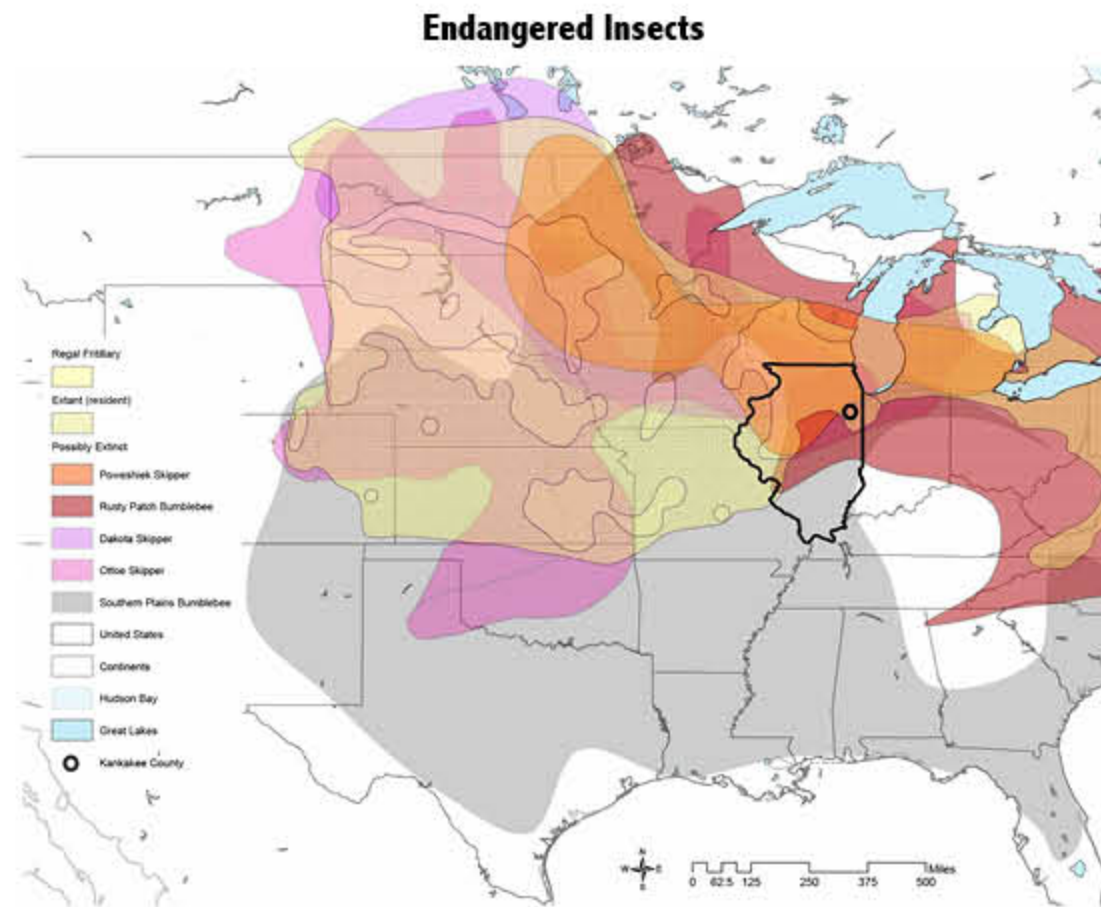
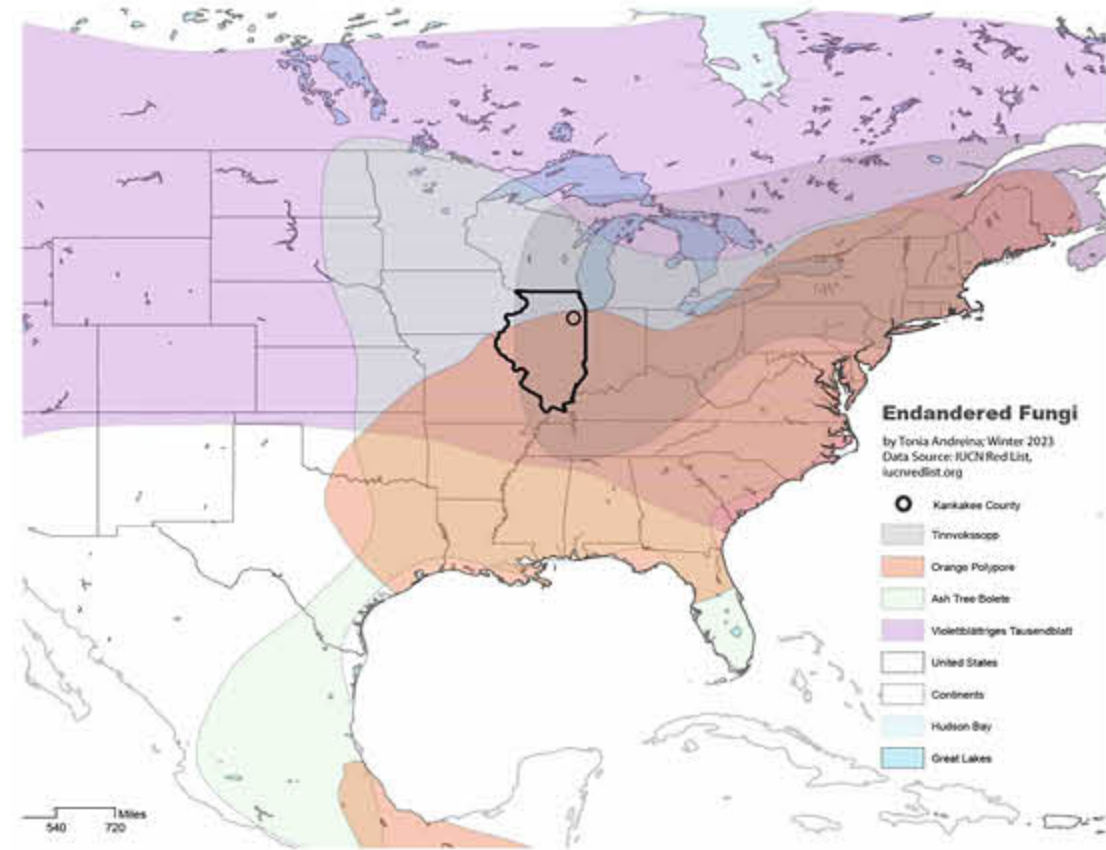
Interactive, Multifunctional Topography and Views



Detailed Topography, Hydrology and Planting by Biome



Ecological Biome Planting Key



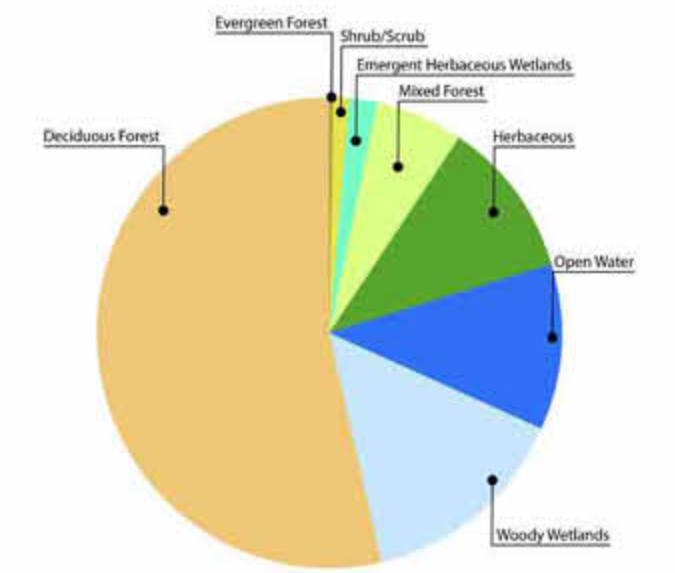
Endangered Species, Kankakee, IL Designing for Habitat & Conservation (Academic)

Kankakee River Valley used to be the destination of 1/5th all birds migrating to continental North America. Tremendous habitat loss has devastated this part of Illinois throughout time.

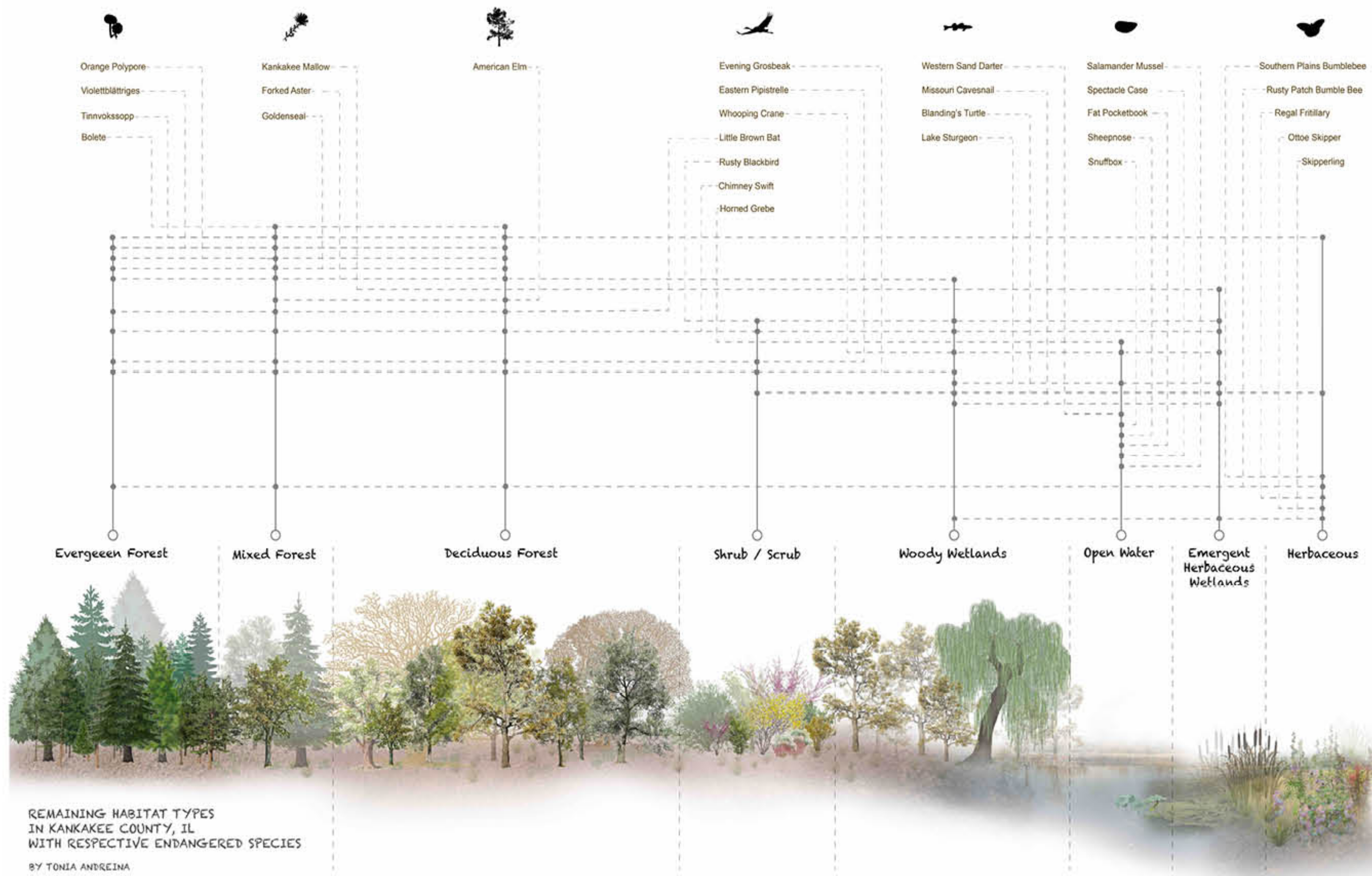
Using LIDAR data in ArcGIS I mapped remaining habitat types known to exist in the county. The most dominant remnant habitat consists of deciduous forests, followed by woody wetlands and open water.

I also mapped Redlist data to show range maps for all species who make their endangered species classification. Species who exist or pass through Kankakee County, IL specifically were selected.

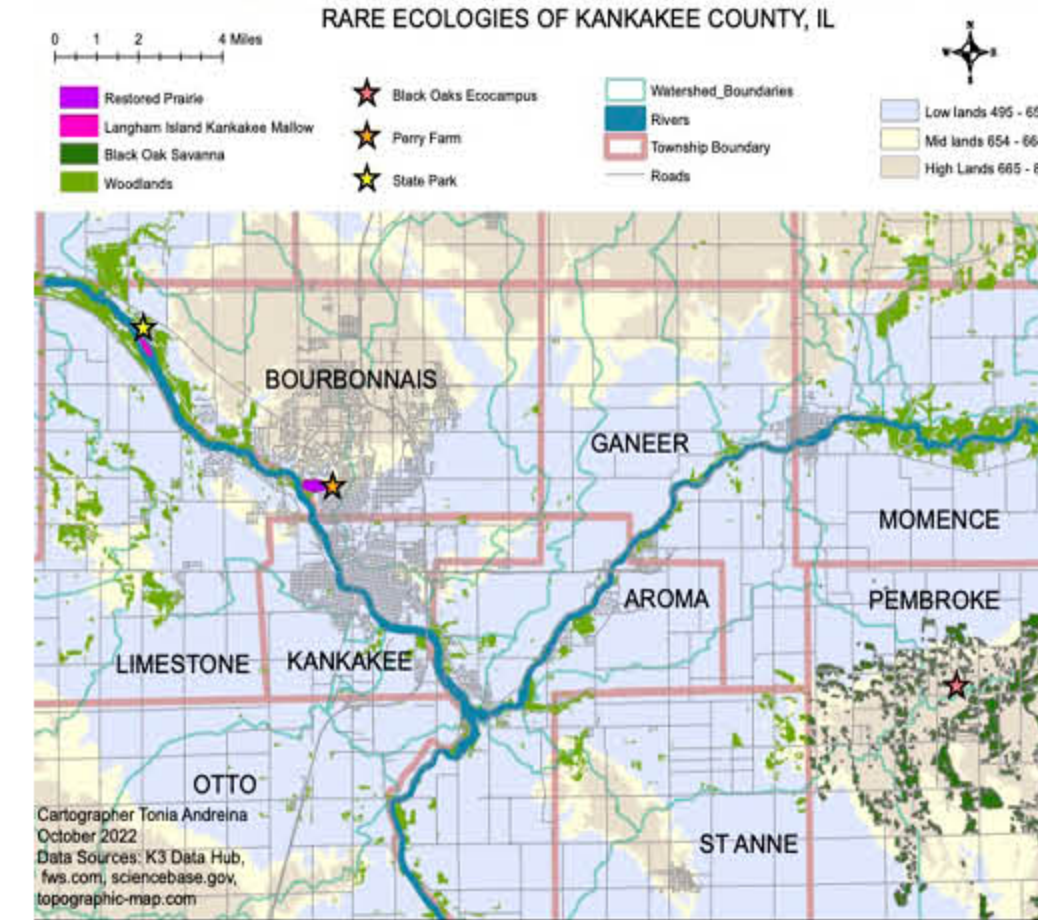
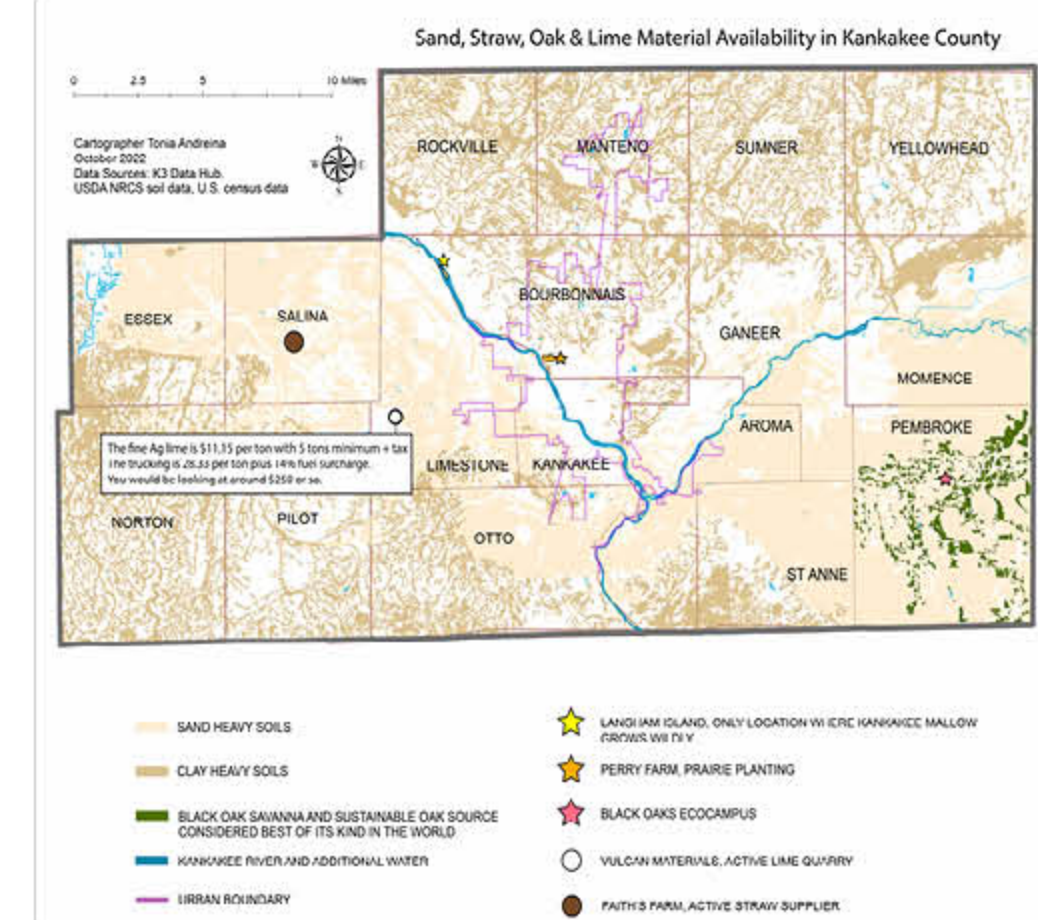
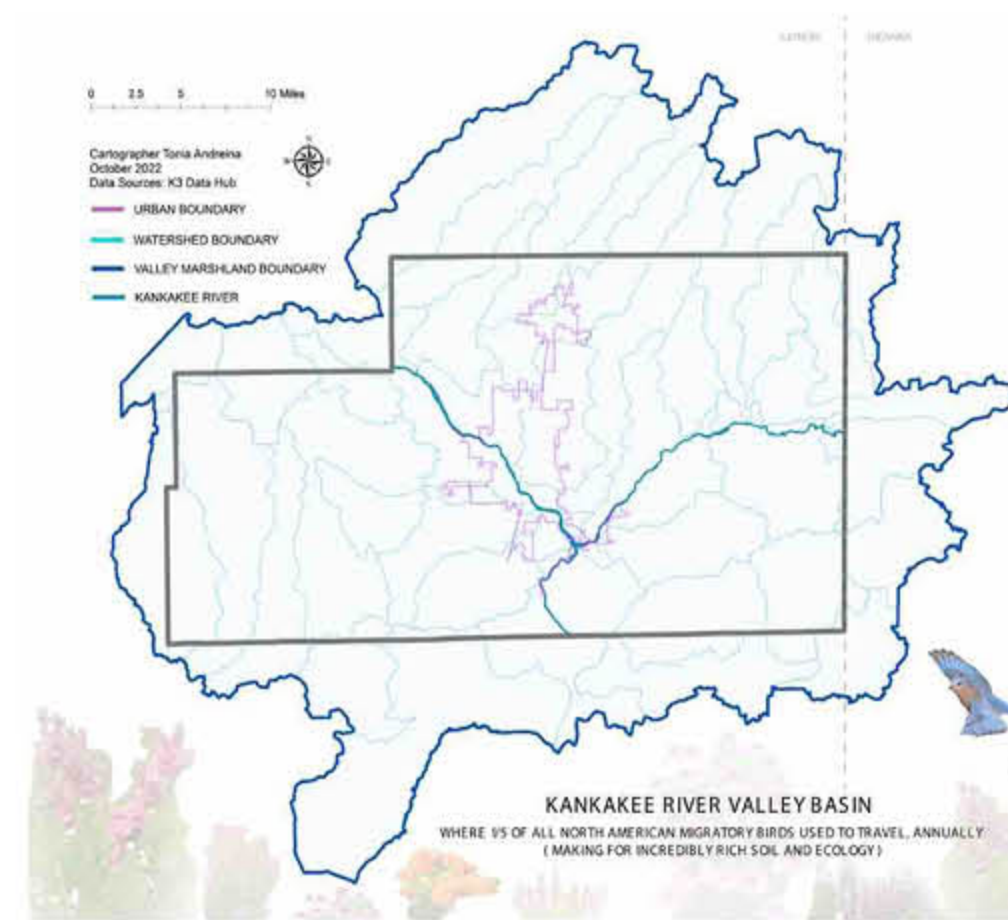
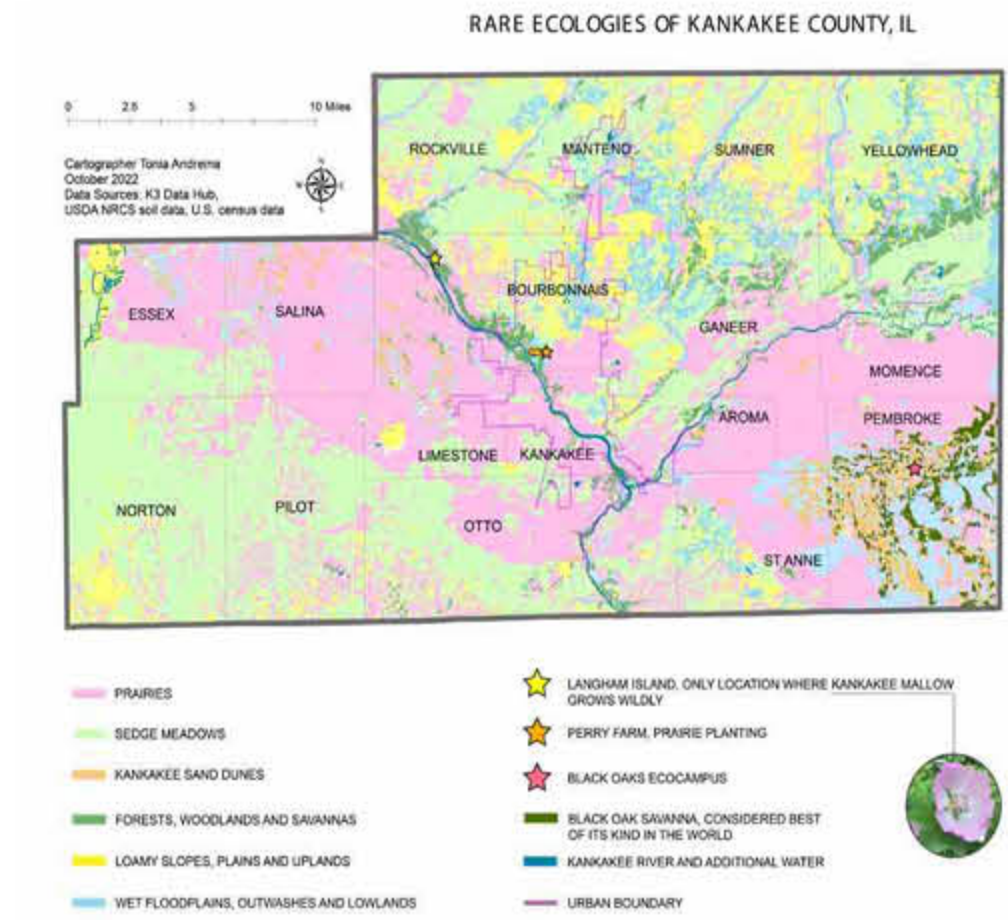
Range maps are categorized into six different groups to help clarify 28 species use of space.



Remaining Habitat Types in Kankakee County, IL



REMAINING HABITAT TYPES
IN KANKAKEE COUNTY, IL
WITH RESPECTIVE ENDANGERED SPECIES
BY TONIA ANDREINA



Endangered Species, Kankakee, IL Designing for Habitat & Conservation (Academic)

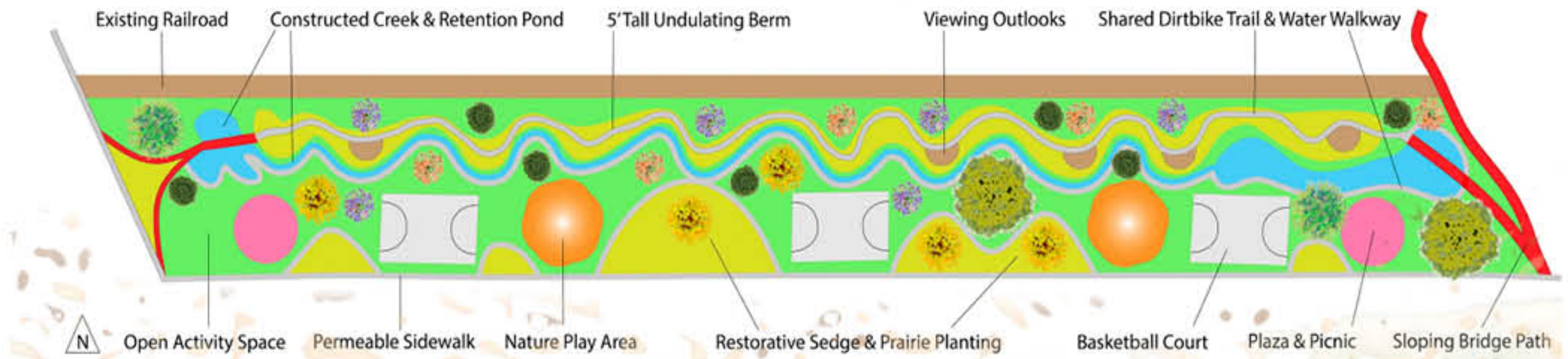
Once I mapped NRCS soil data showing original ecologies across Kankakee county I also mapped relative elevations across the county to give a sense of regional hydrology flows.

Watershed boundaries surrounding the Kankakee River Valley are also mapped to give a sense of how important area covered by this county once was for traveling birds.

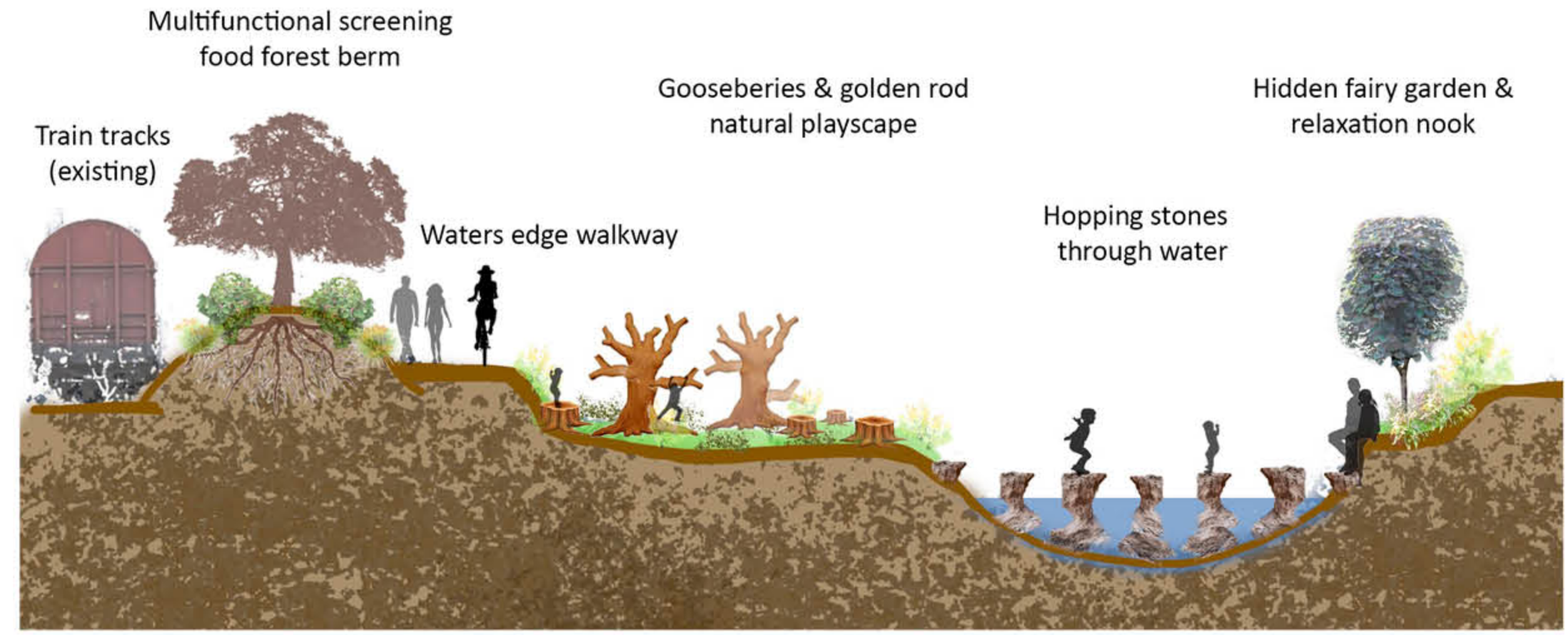
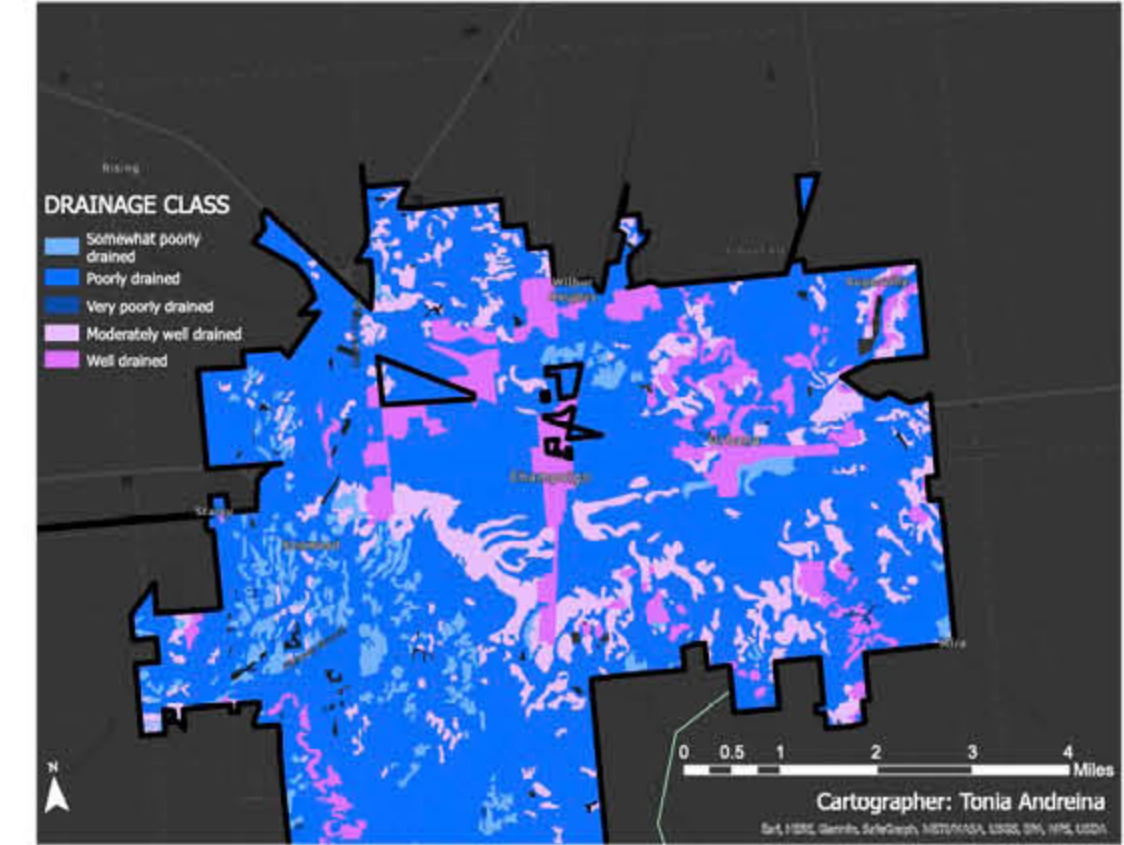
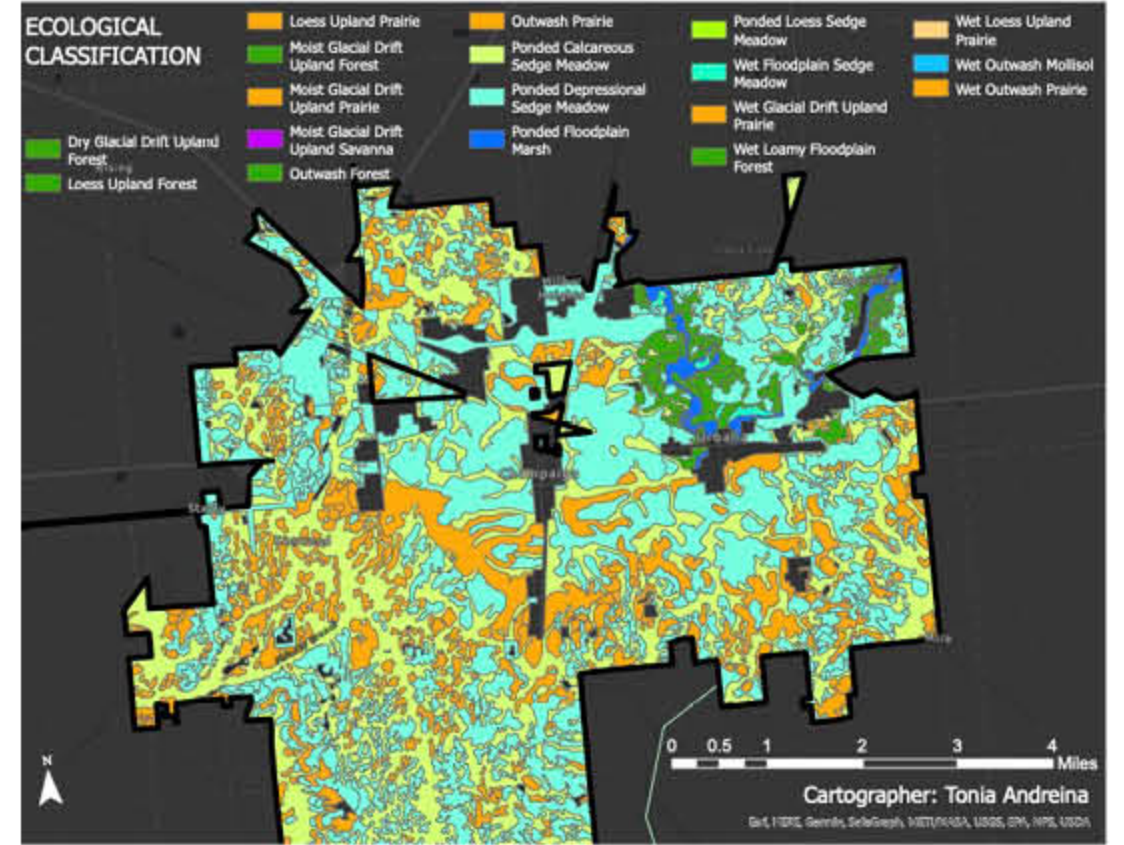
A deep section I made in Adobe Photoshop and Illustrator depicts all remaining habitat types in Kankakee County. This graphic also shows which habitat type(s) correspond with all Redlist species deemed endangered species.

The next phase of this project will focus on developing theoretical planting plans for each habitat type.

Based on what habitat type their land seems to emulate most, people who wish to plant for local endangered species will be able to use native plant varieties from my plans as inspiration for their own landscapes.



SCALE 1:500:1" = 41.67'



Garden Hills Neighborhood, Champaign, IL Designing for Access and Diversity (Academic)

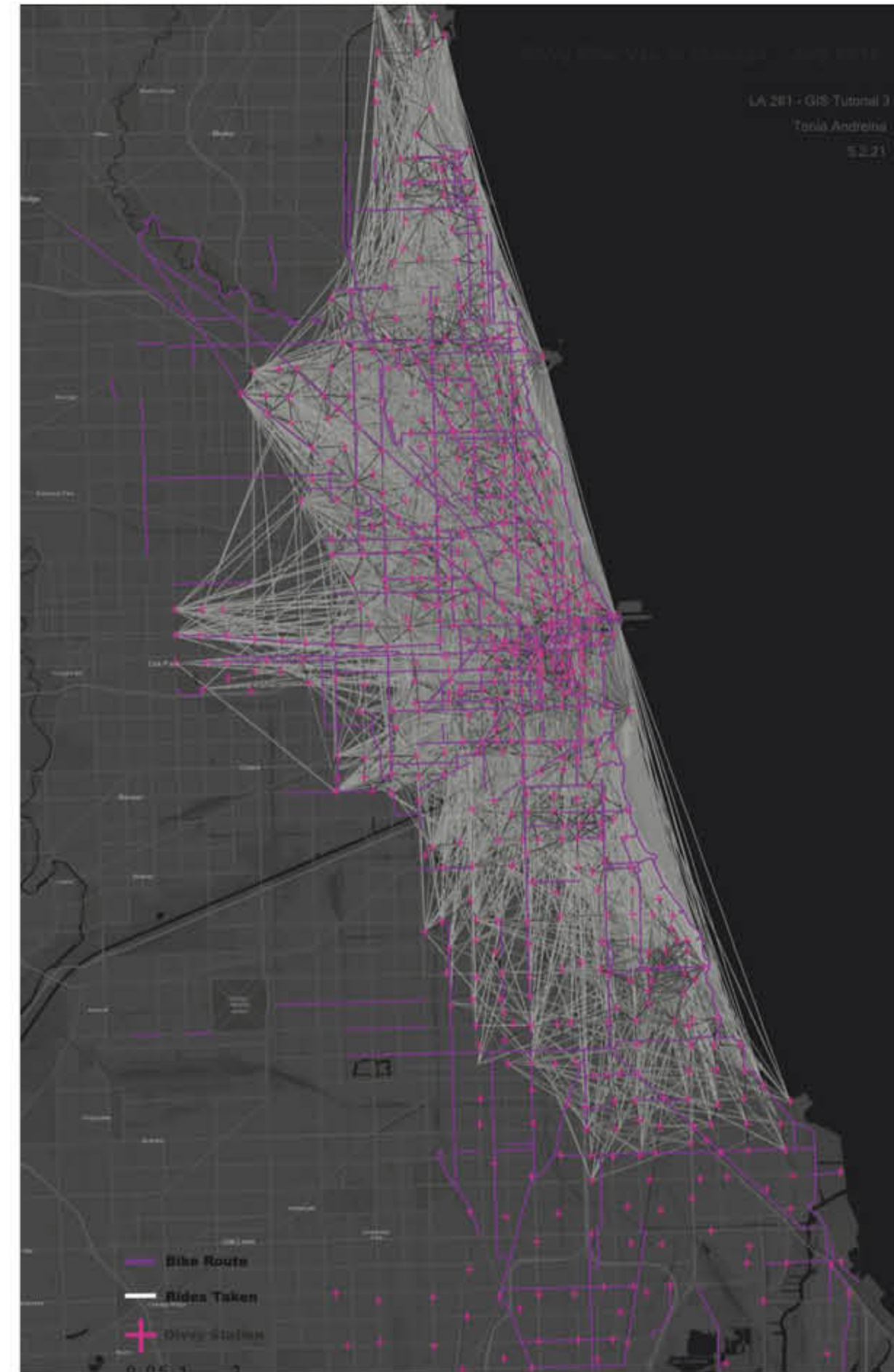
Kids play on the streets of a neighborhood bordered by a vacant rail road strip where the sidewalk ends. Paths currently lead to a patch of grass with no particular features for public enjoyment or safety. Reclaiming community open space, this concept embraces the youthful spirit and land use reflective of locals observed on site. Paths for dirt biking, log steppers through constructed water management ways and wooden climbing structures amidst naturalized, low-maintenance perennial landscaping are all included.

Designed in AutoCAD to Adobe Illustrator with perspectives in Adobe Photoshop.

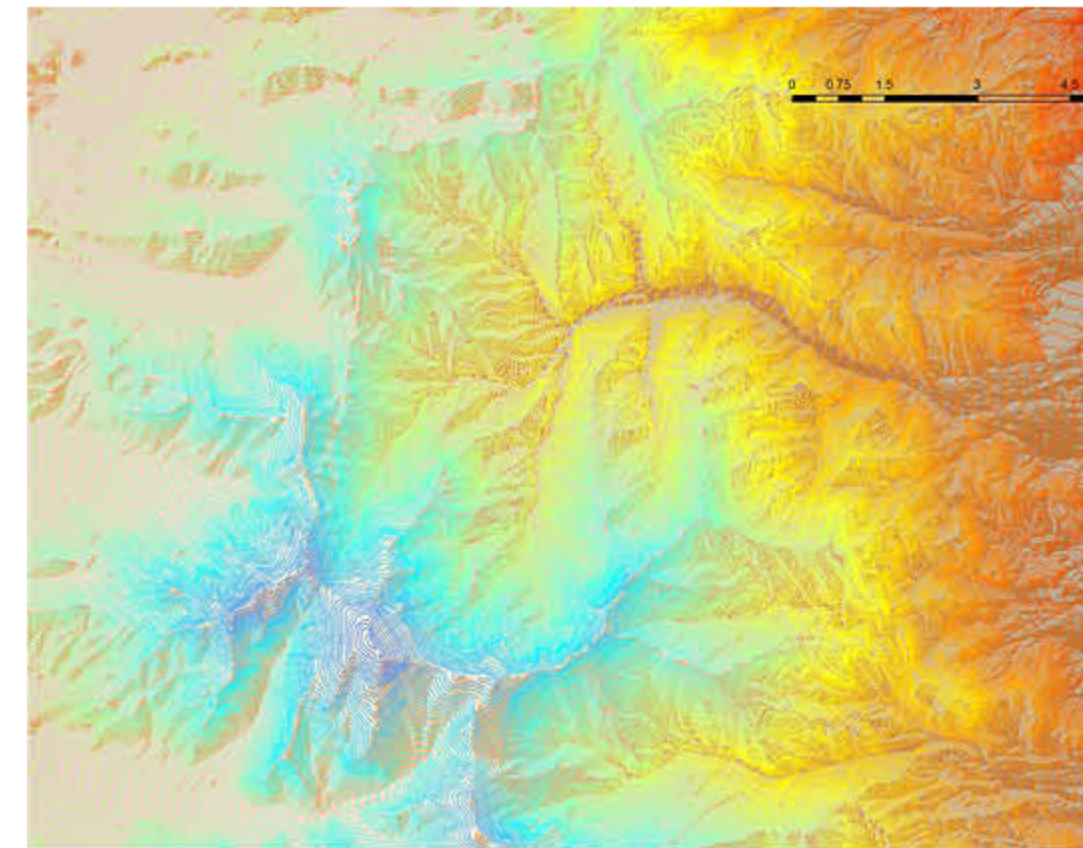
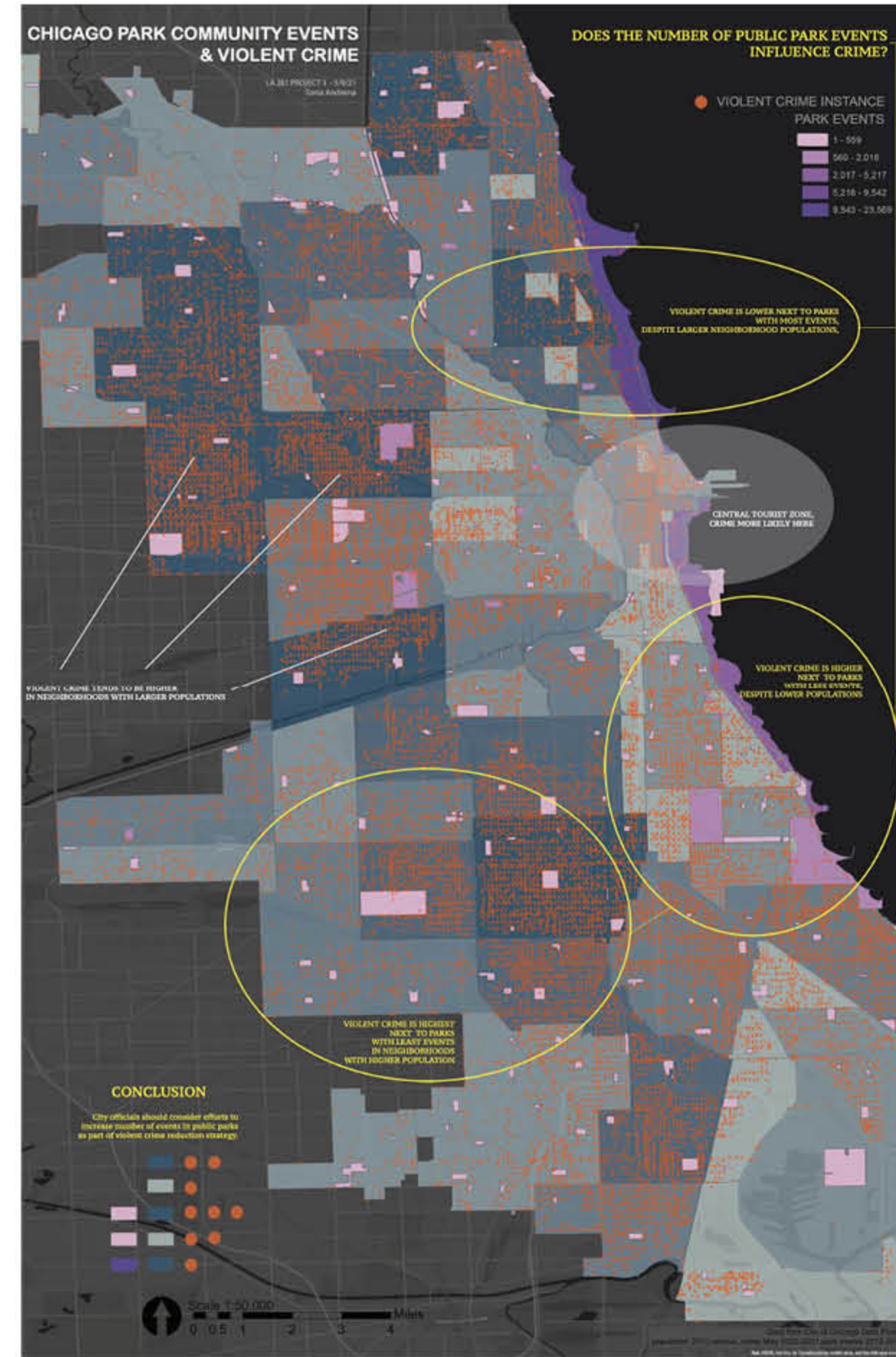
Mapping U.S. Census data in ArcGIS reveals the site is within the second lowest median income class across all of Champaign, IL. 3D modeling merges materials of metal, wood and porous cork, representing introduced water management and multi-textured cohesion.

Pops of color find their way into the landscape through plazas, play areas and circulation paths for people, bikes and strollers.

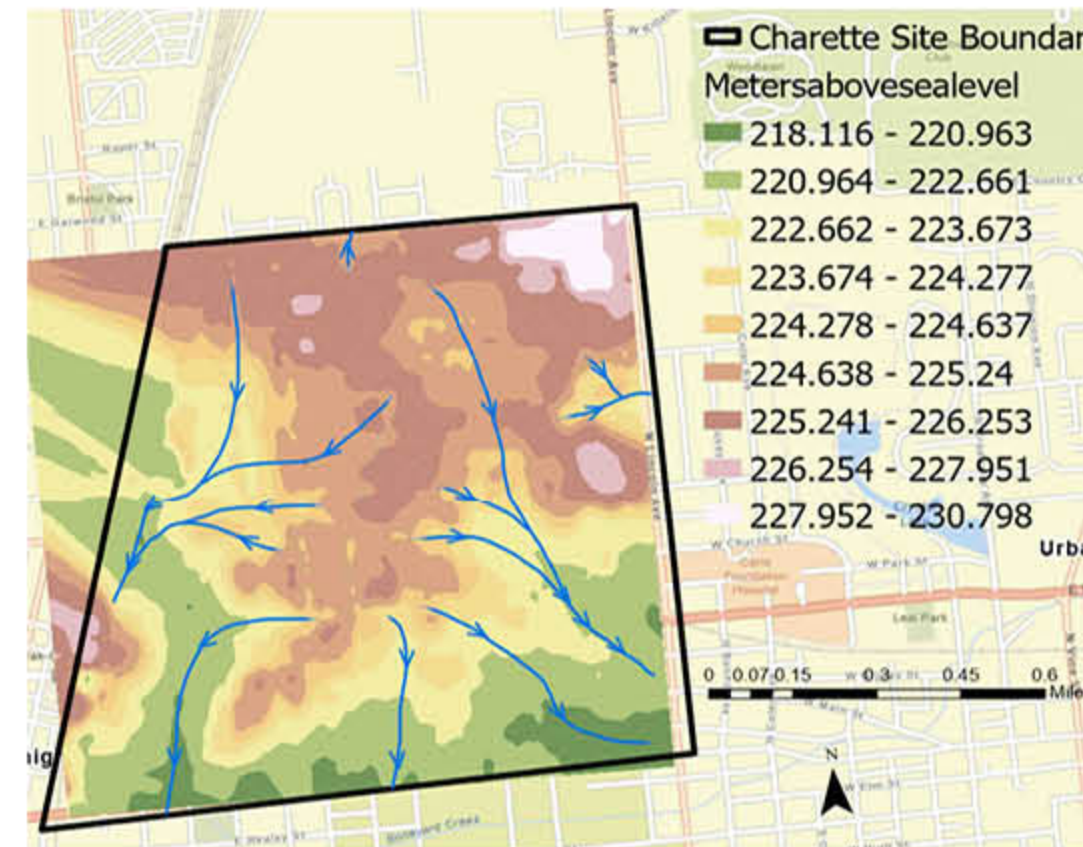
Divvy Bike Access and Travel



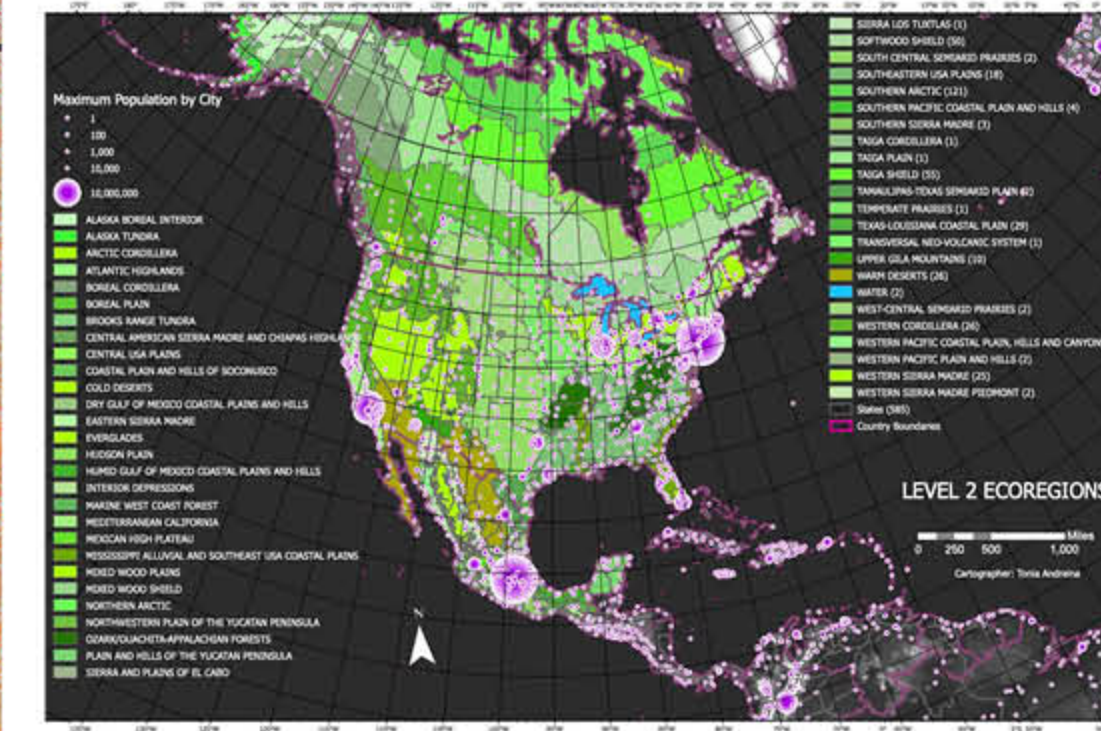
Public Events, Population Density and Crime Rates



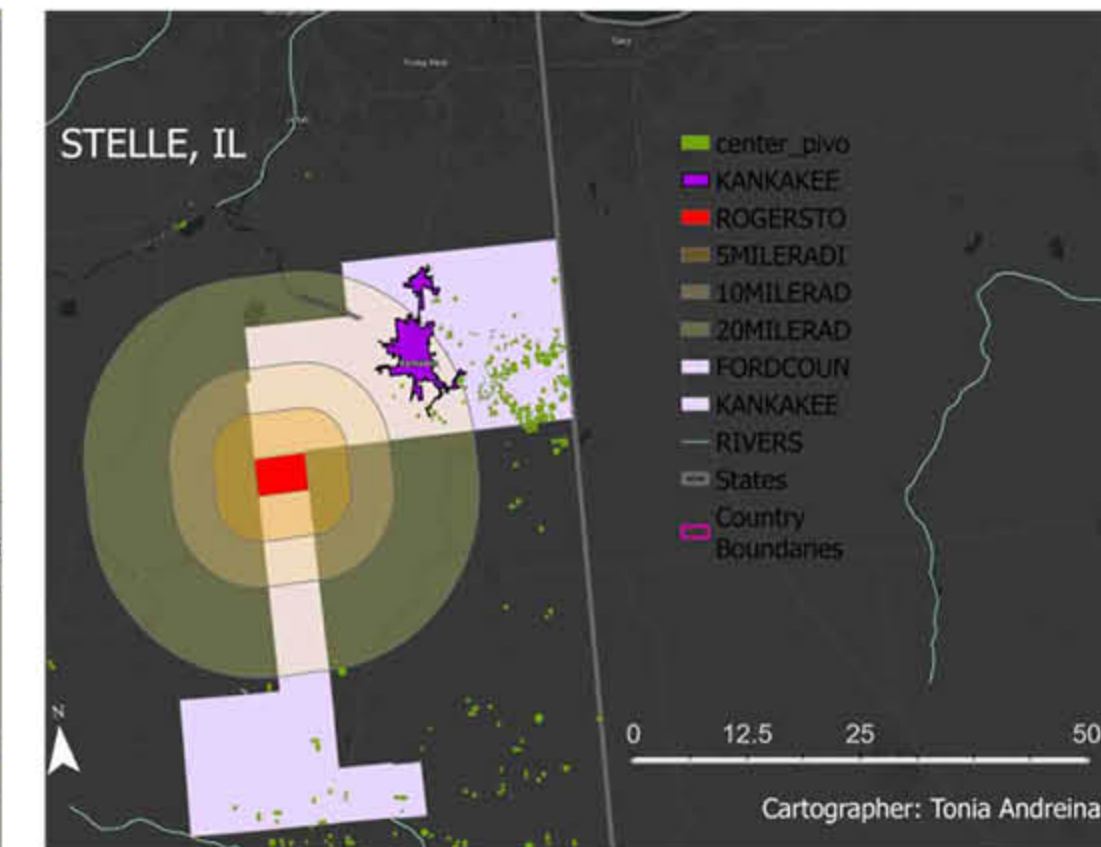
Death Valley Topography - Topography is shown using ArcGIS



Topography Analysis - Google Earth to ArcGIS to Adobe Illustrator reveals hydrology



Ecoregions of North America - Habitat zones are shown with ArcGIS



Intentional Community - Originally founded as a sort of cult retreat in preparation for impending environmental doom in the 1970's, the town of Stelle remains an environmentally sensitive community with many off-grid structures.

Critical Mapping Physical & Cultural Geographies (Various Projects, Academic)

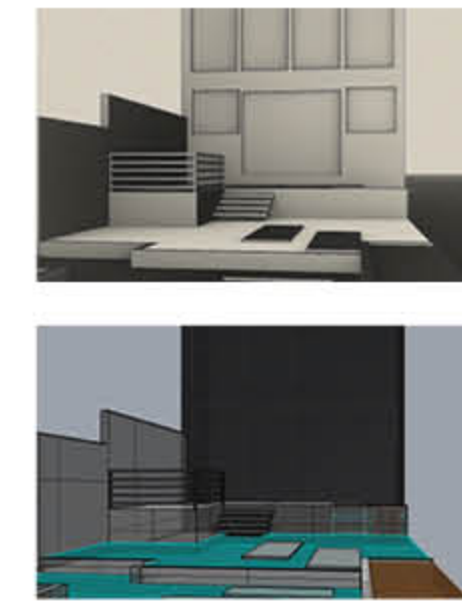
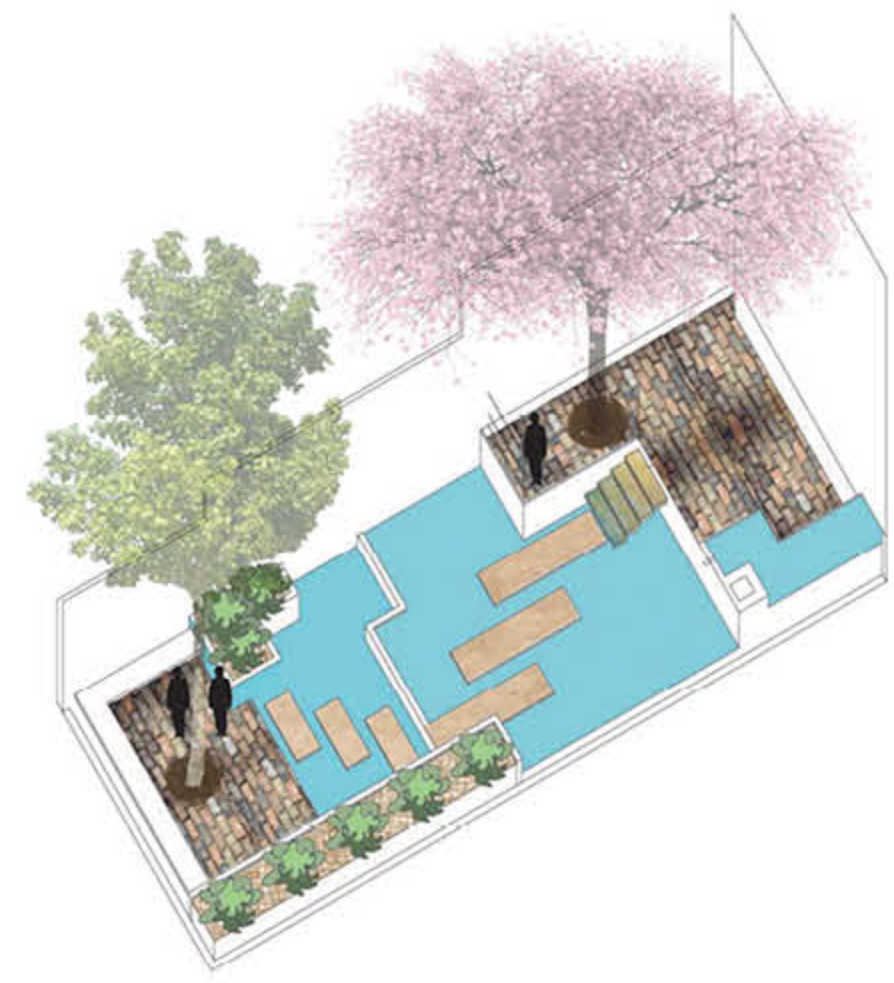
Divvy bike station allocation is shown with ArcGIS, along with all documented bike rides for a given year. Compared with official bike routes, it is evident riders are using alternative paths, informing possible additions to existing Chicago bike routes.

Another map shows violent crime mapped as point data along with frequency of Chicago Park events, by location. Three areas of analysis suggest regardless of population density, more public events corresponds with less violent crime.

Physical geographies like contours are mapped, revealing hydrology and flow direction, allowing for informed design interventions.

ArcGIS gives place to Ecoregions of North America, showing regional trends for habitat diversity.

Environmentally-valued community, Stelle, IL is mapped in proximity to the Kankakee urban boundary and center pivots, showing a spatial relationship between populations and regional food production.

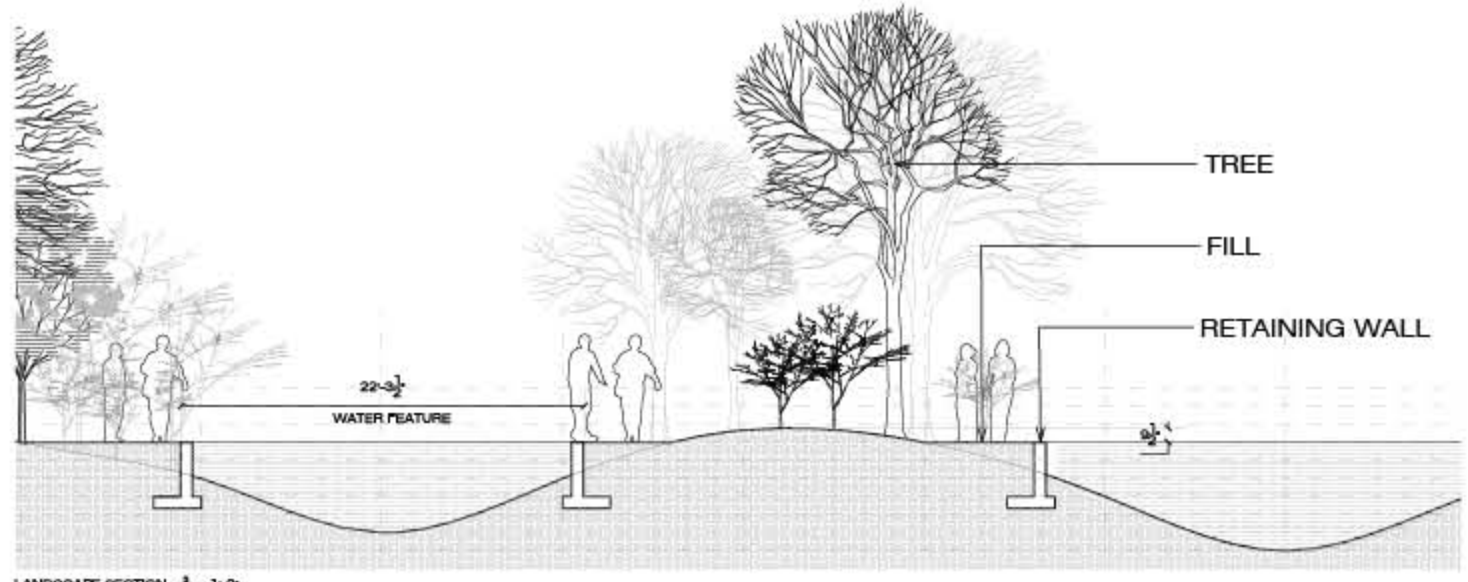


Site Analysis to Construction Water-Inspired Landscapes (Academic)

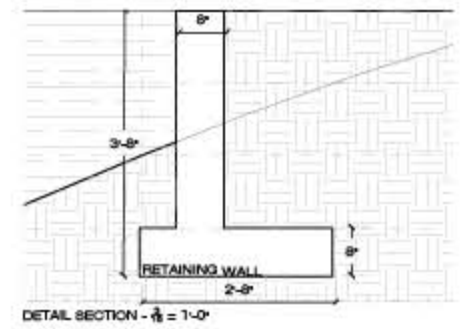
Using AutoCAD I showed how retaining walls can be implemented to establish water front access.

Terrain layers I mapped with ArcGIS and formatted in Adobe Illustrator inform a public water way, developed by sequenced datums in AutoCAD.

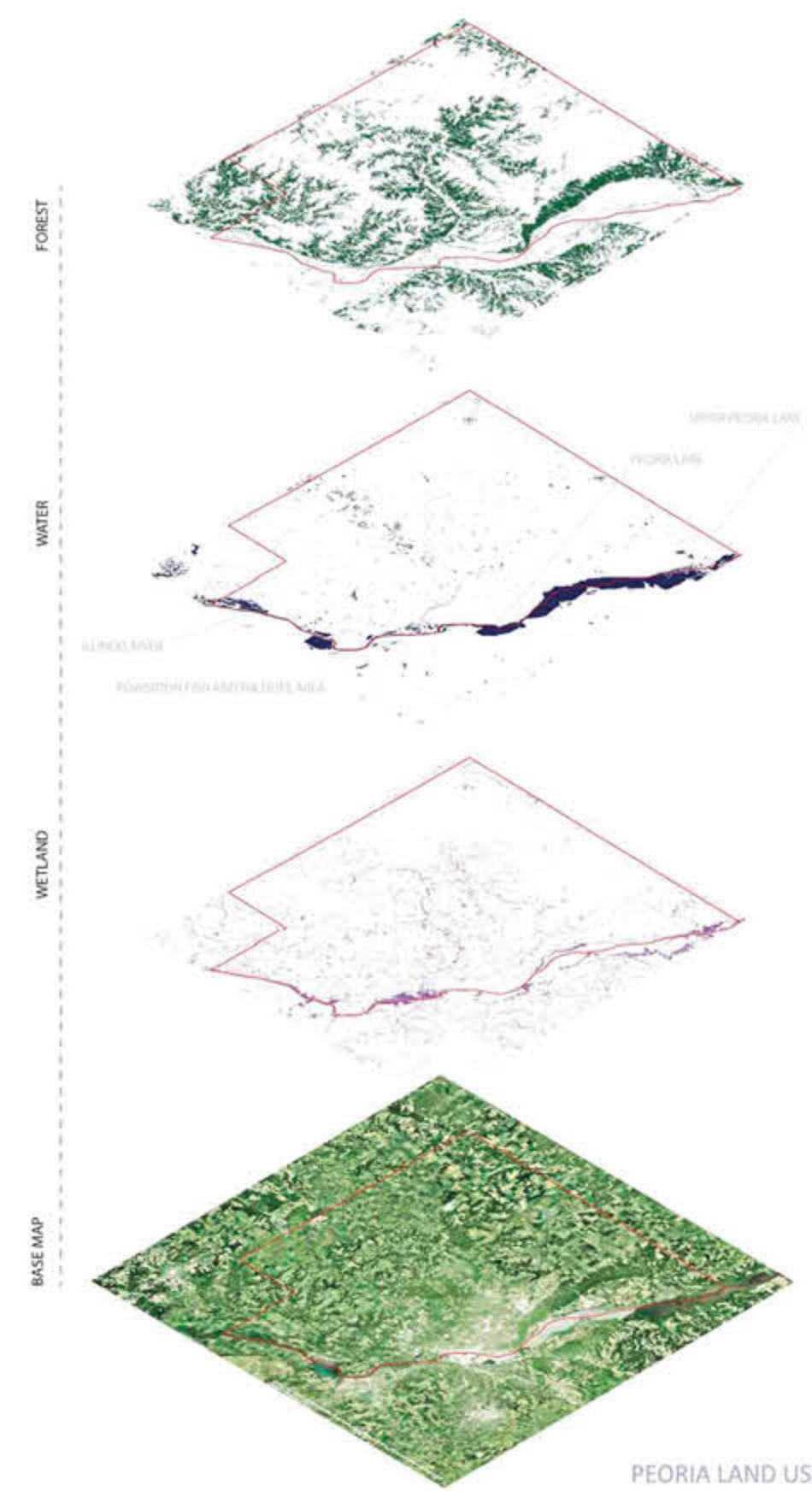
Four possible concepts for a private water feature are explored through Rhino and Adobe Illustrator, with a final model rendering.



LANDSCAPE SECTION - 1/4" = 1'-0"

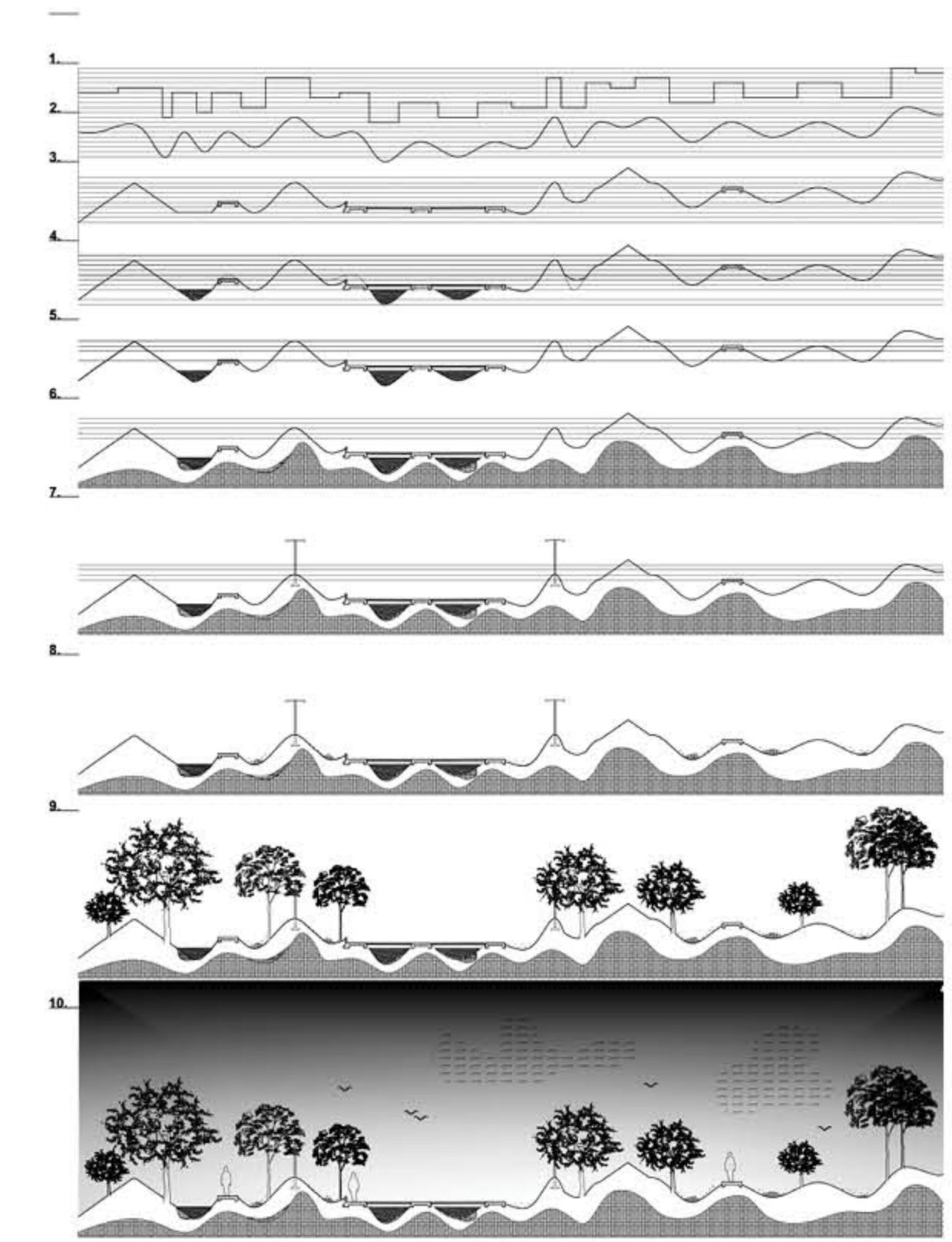


DETAIL SECTION - 1/4" = 1'-0"



PEORIA LAND USE

TONIA ANDREINA
4.20.23



TONIA ANDREINA
LA-281
SPRING 2020

- 1. DATUMS
- 2. ELEVATIONS
- 3. ANGLE OF REPOSE
- 4. CUT OR FILL
- 5. WATER
- 6. SURFACES
- 7. SOILS
- 8. INFRASTRUCTURE
- 9. GRADES
- 10. TREES
- 11. PEOPLE, ANIMALS, PLANTS



SEASONAL WETLANDS



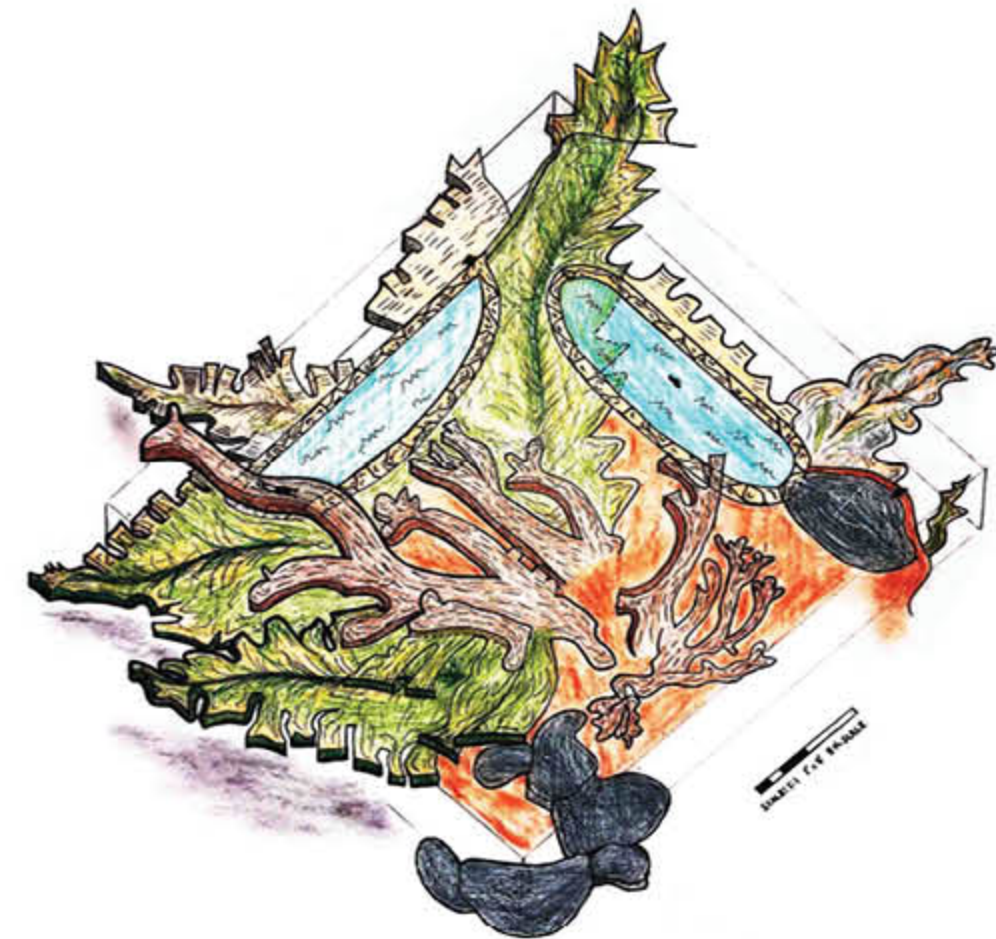
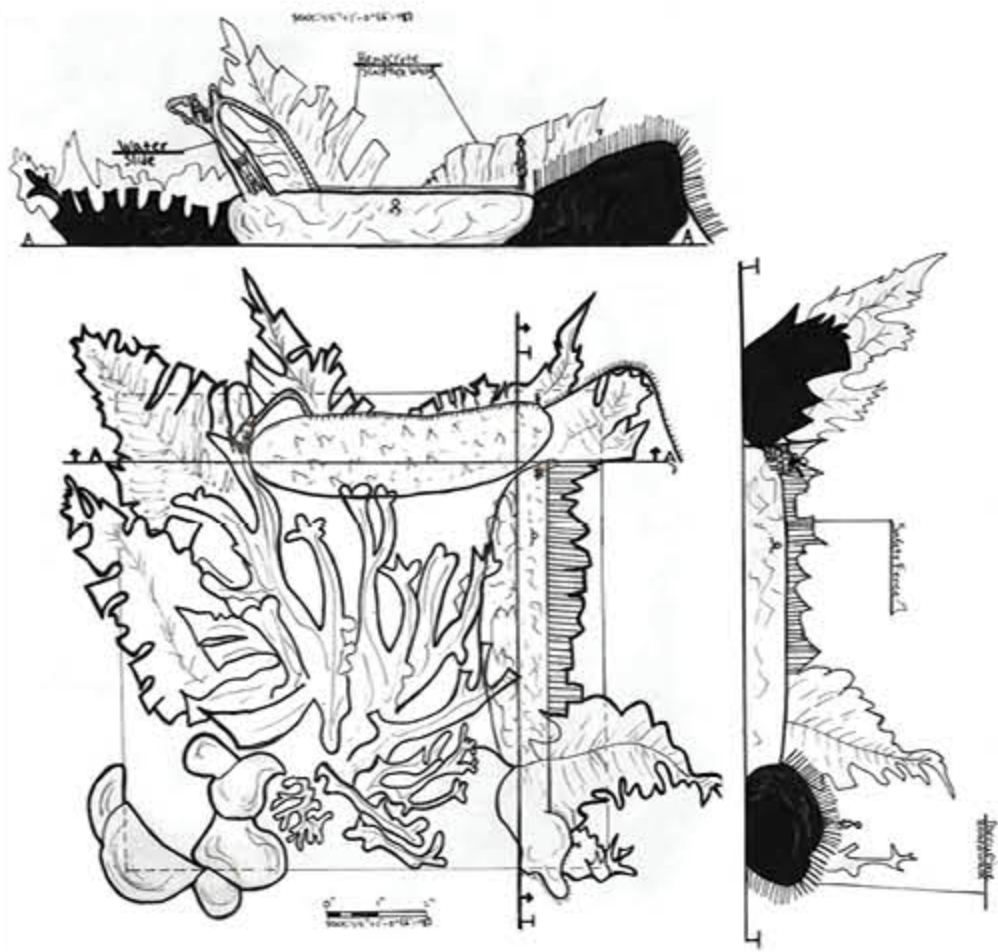
ISLAND RETREAT



BACK YARD BUNGALO

TONIA ANDREINA
LA 281 - PROJECT 2

4/5/21

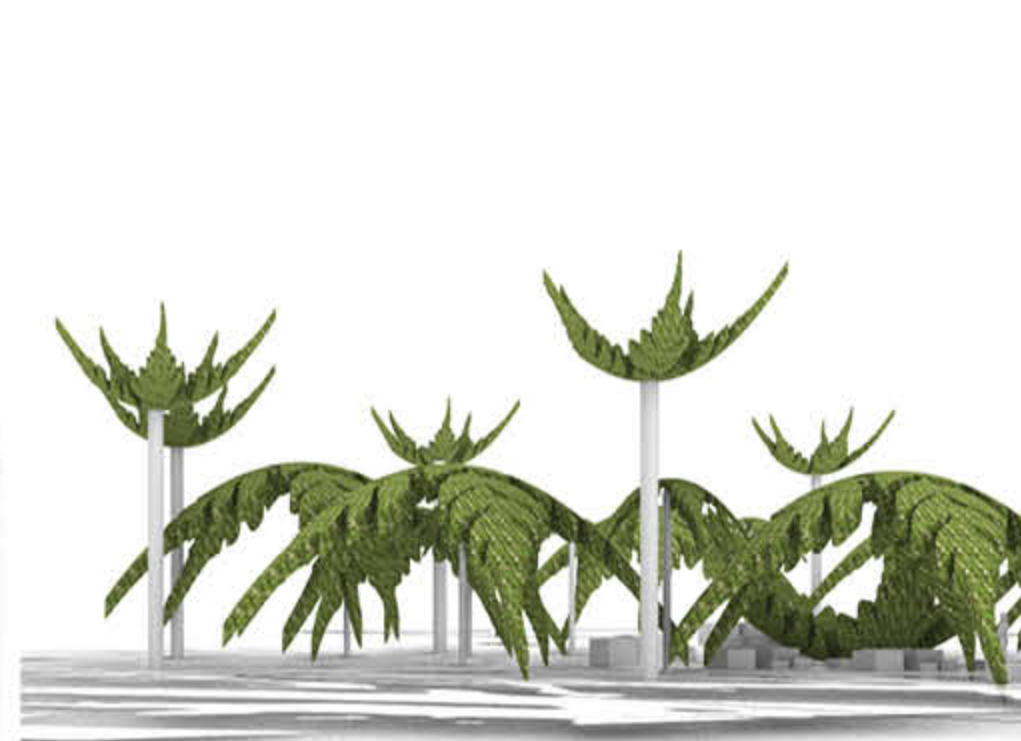


Texture & Modeling Iteration
Multi Media Representation
(Academic)

Paper models focus on exploring dimensionality, seen through multiple themed concepts.

I turn a fern inspired model into a hand-drawn axon and a Rhino model. Paper models inspire a sort of plaza space, covered in sculptural textured overhead canopy.

Hand sketches explore texture and tone in 2D.



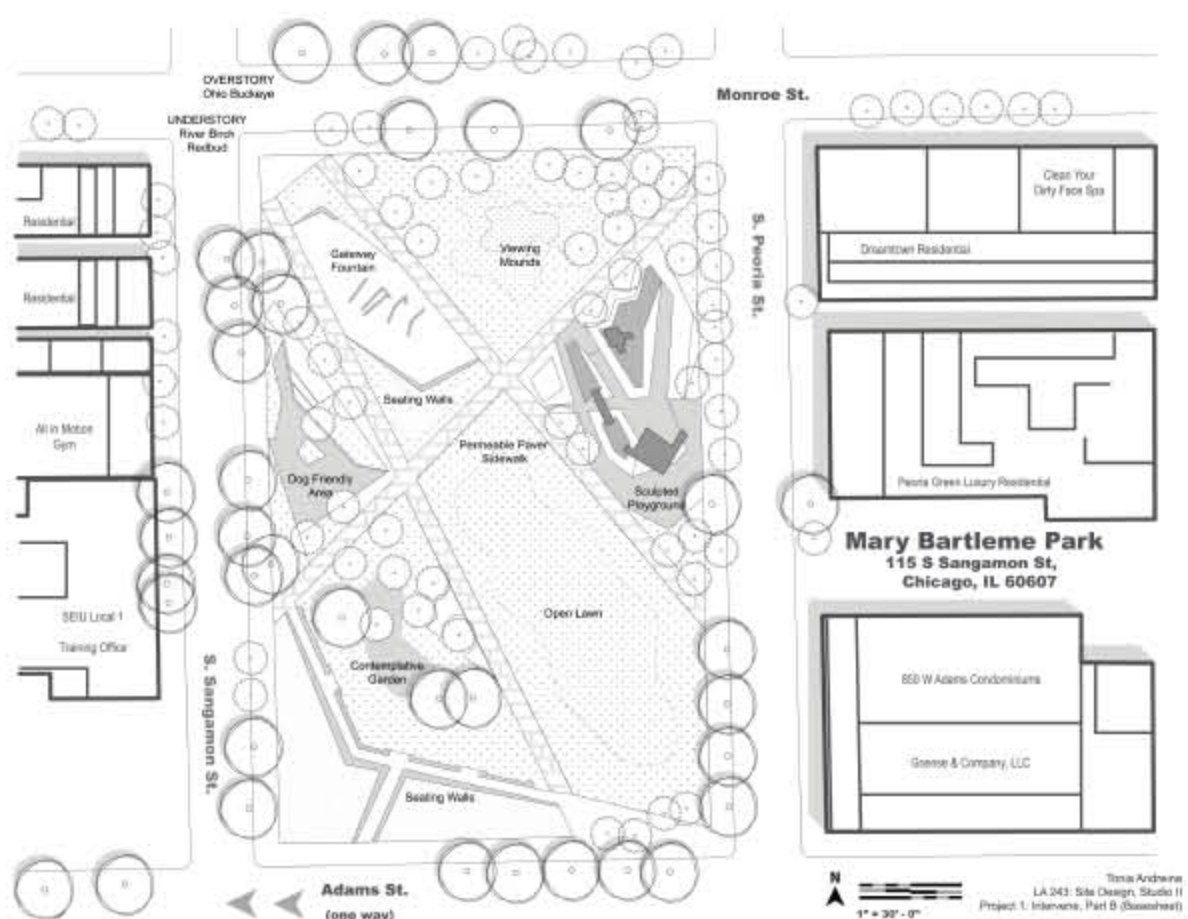
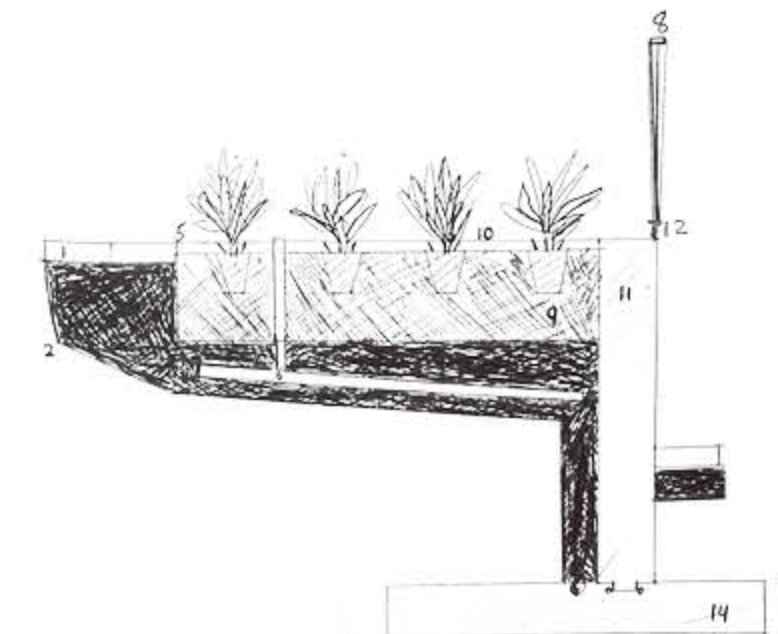
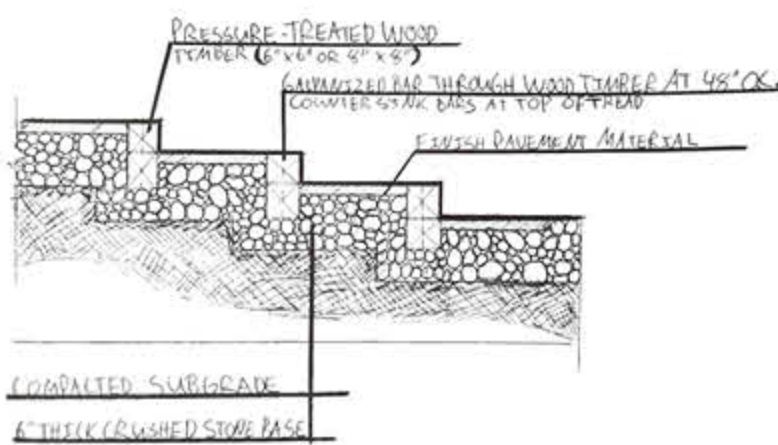
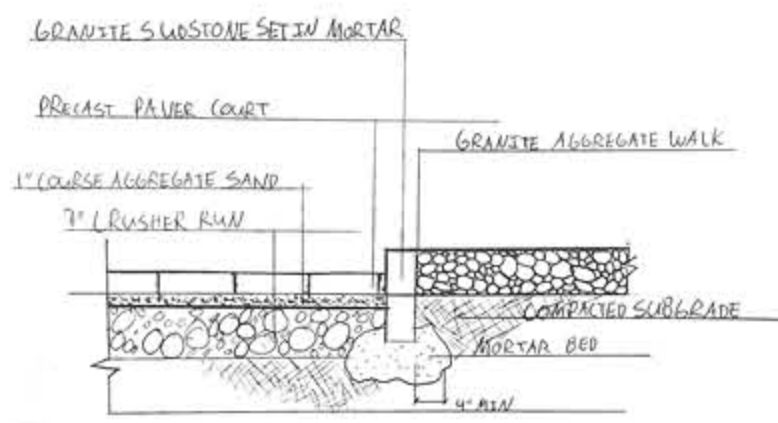
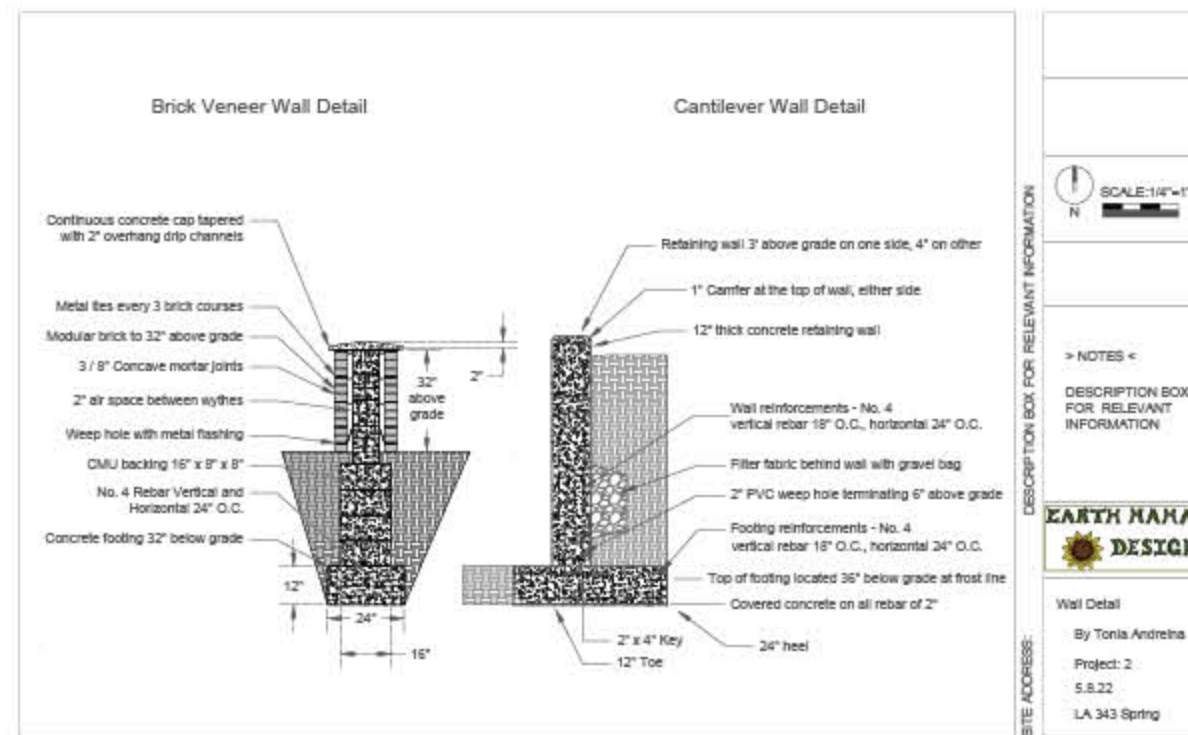
Construction Documents

Design Details, Various Projects (Academic)

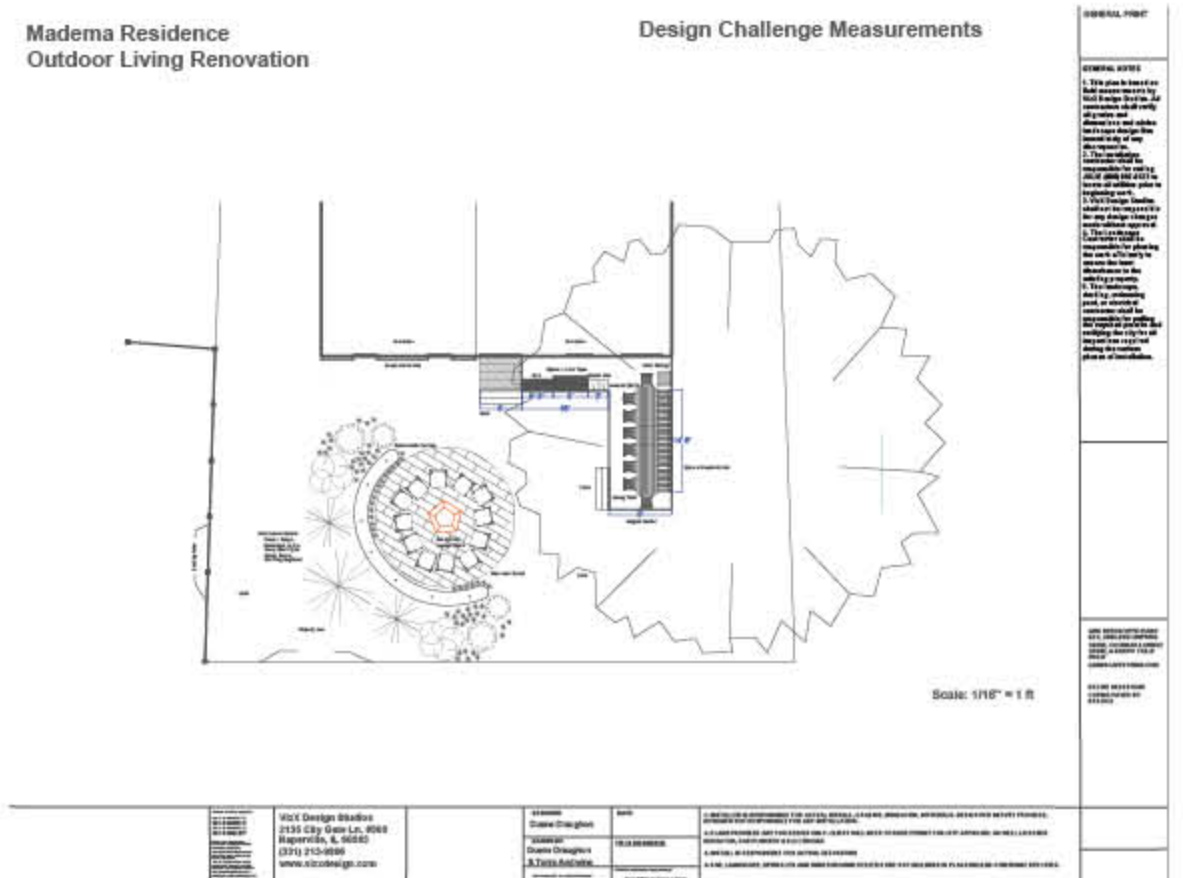
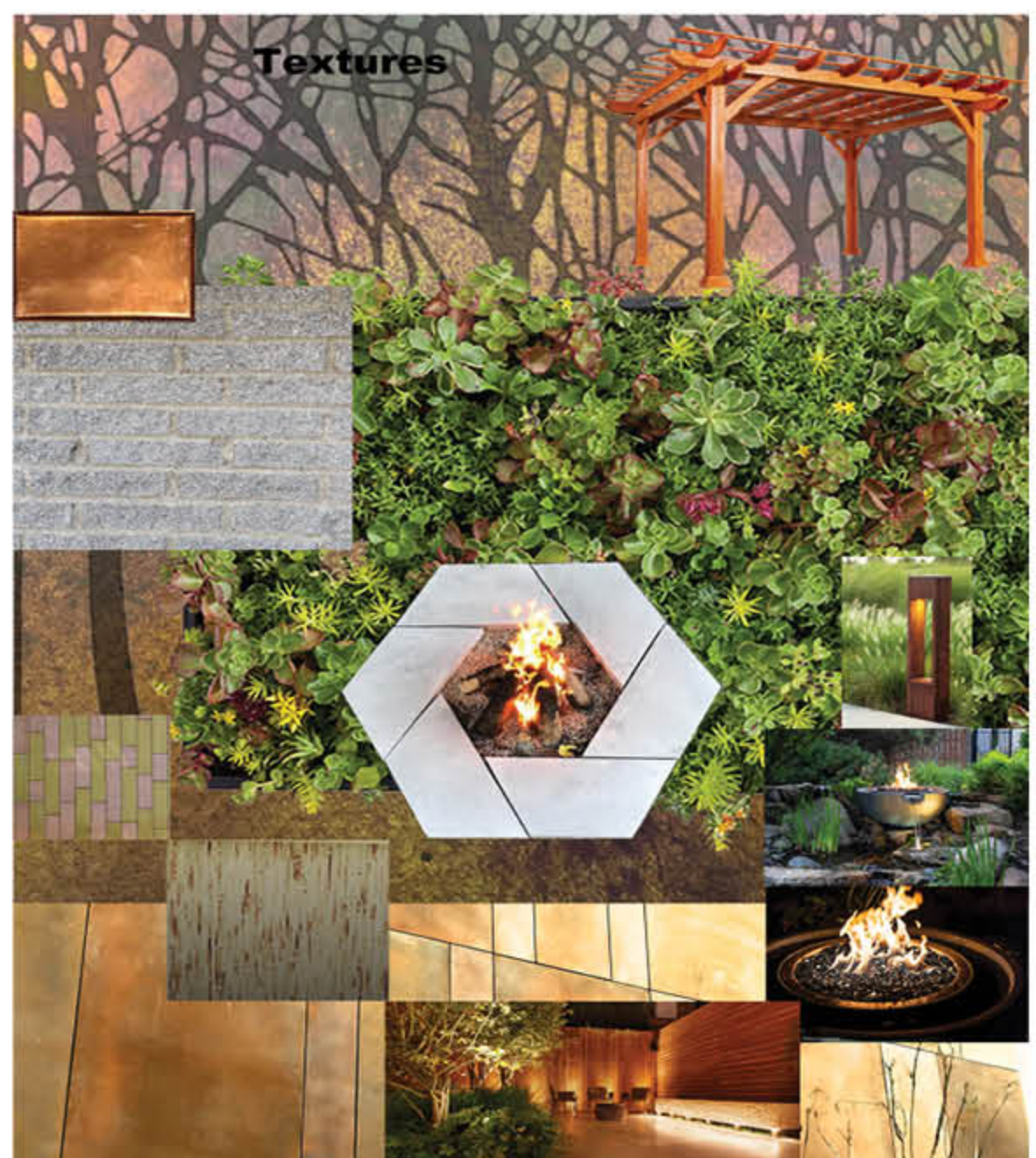
AutoCAD is used to create a base plan of Mary Bartleme Park for design intervention and various landscape walls.

Hand sketched construction details depict two stair concepts, plus a planter bar idea.

AutoCAD constructs a back yard retreat at a private residence. A vision board and perspective made in Adobe Photoshop depict a green wall and overhead pergola, regulating temperature extremes, increasing opportunity for outdoor comfort at home.



Design Intervention - A texture sheet organizes potential experiences for a family. Overhead pergola space can hold vining flowers for beautiful entertainment, while stylish fire features offer warmth beside bronze and copper garden accents.



Bourbonnais Upper Grade Center, IL

Creating A Reading Garden, Lorax-Inspired (Academic)

A grassy lot over three acres looms next to a school and the public library, waiting for design intervention and cohesion with surrounding community assets. Regular mowing expense comes in the form of financial and environmental detriment.

A woodies-focused planting design creates innumerable learning opportunities for kids of all ages in the Lorax inspired garden concept. Native paw paw and cat tails make good use of what was originally a ponded depressional sedge meadow. In the spirit of restoration ecology, native sedges are brought in to cover the entirety of surrounding basin space in the site valley. Plants establish four season interest in what currently exists as lawn.

Once established, this site provides youth and teachers many unique opportunities for ecology lessons, food access and recreation.

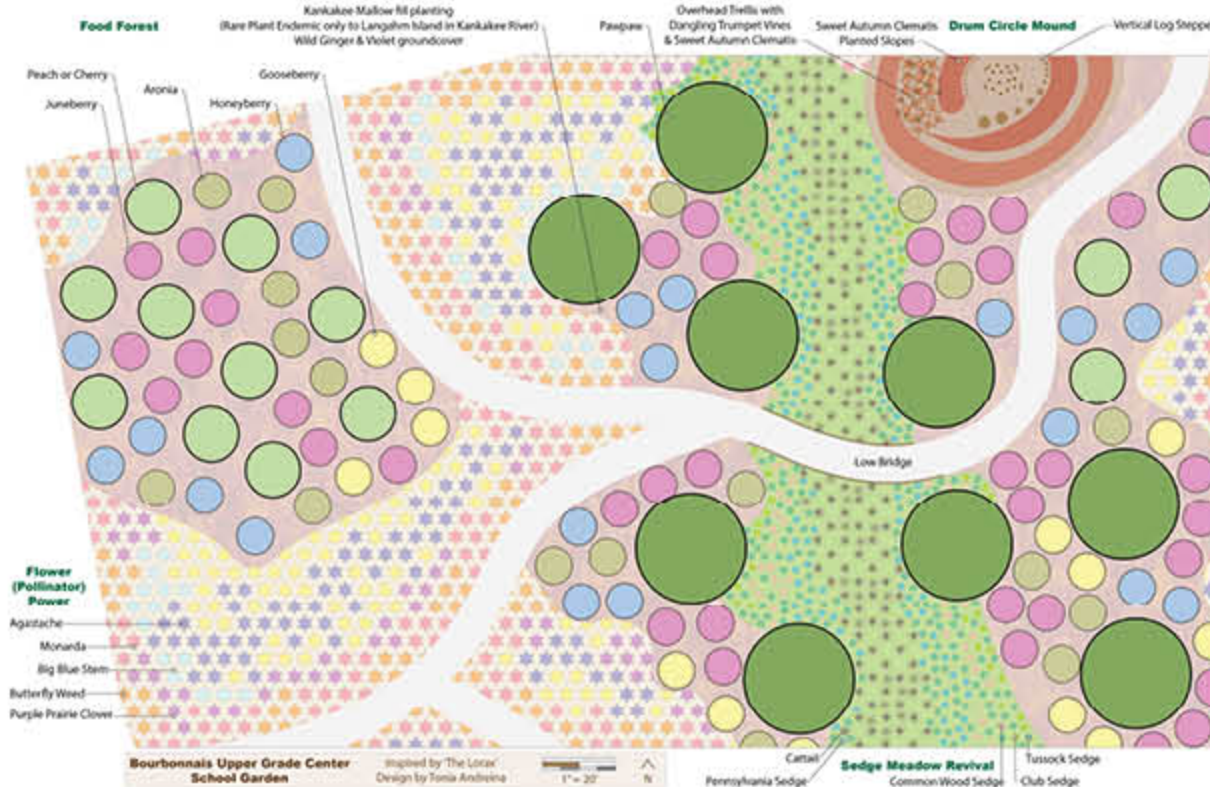
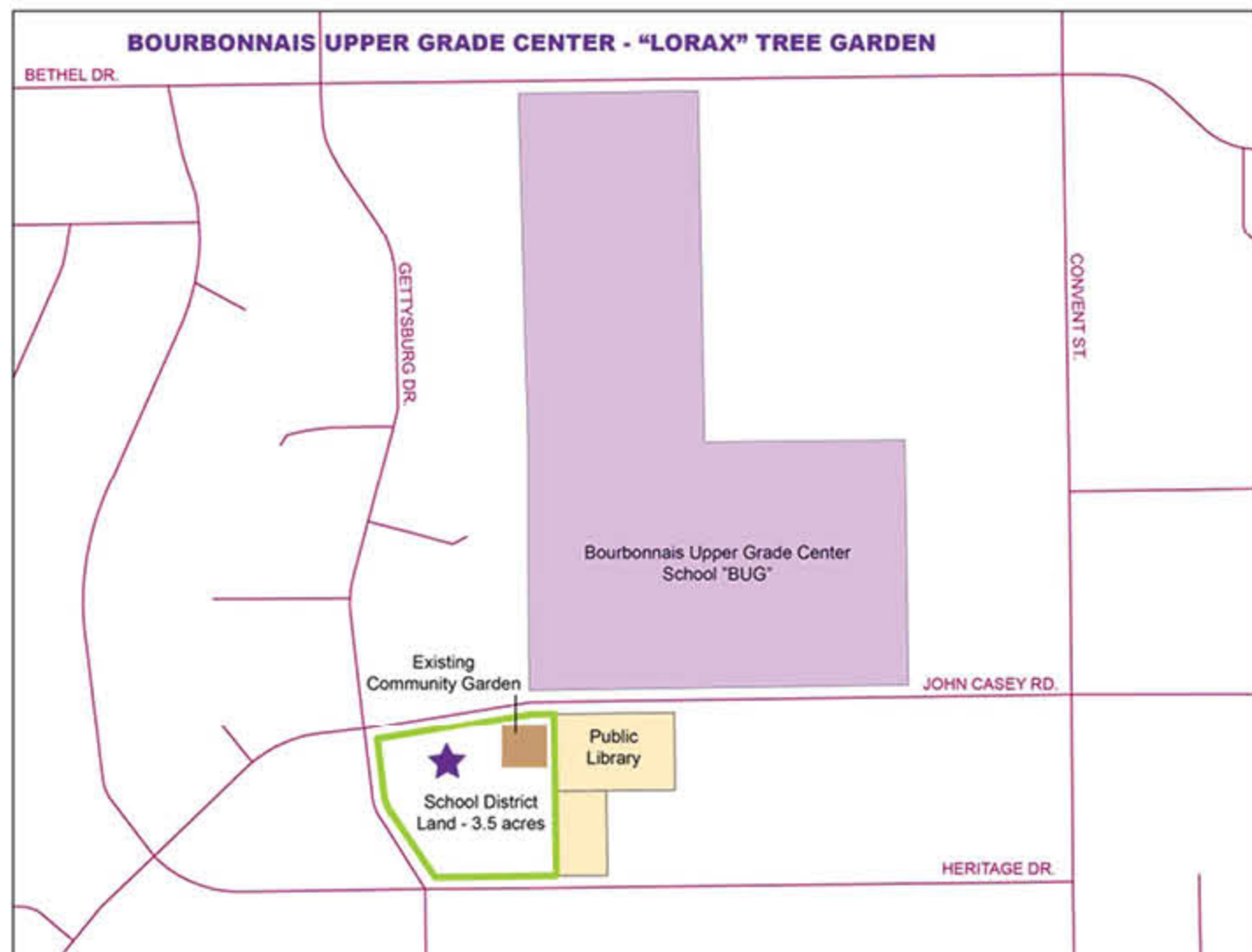


The Lorax brings to life the magic of nature for children of all ages.

This story transforms flowering plants into environmental stewardship by fostering beautiful, awe-inspiring memories for all who visit.

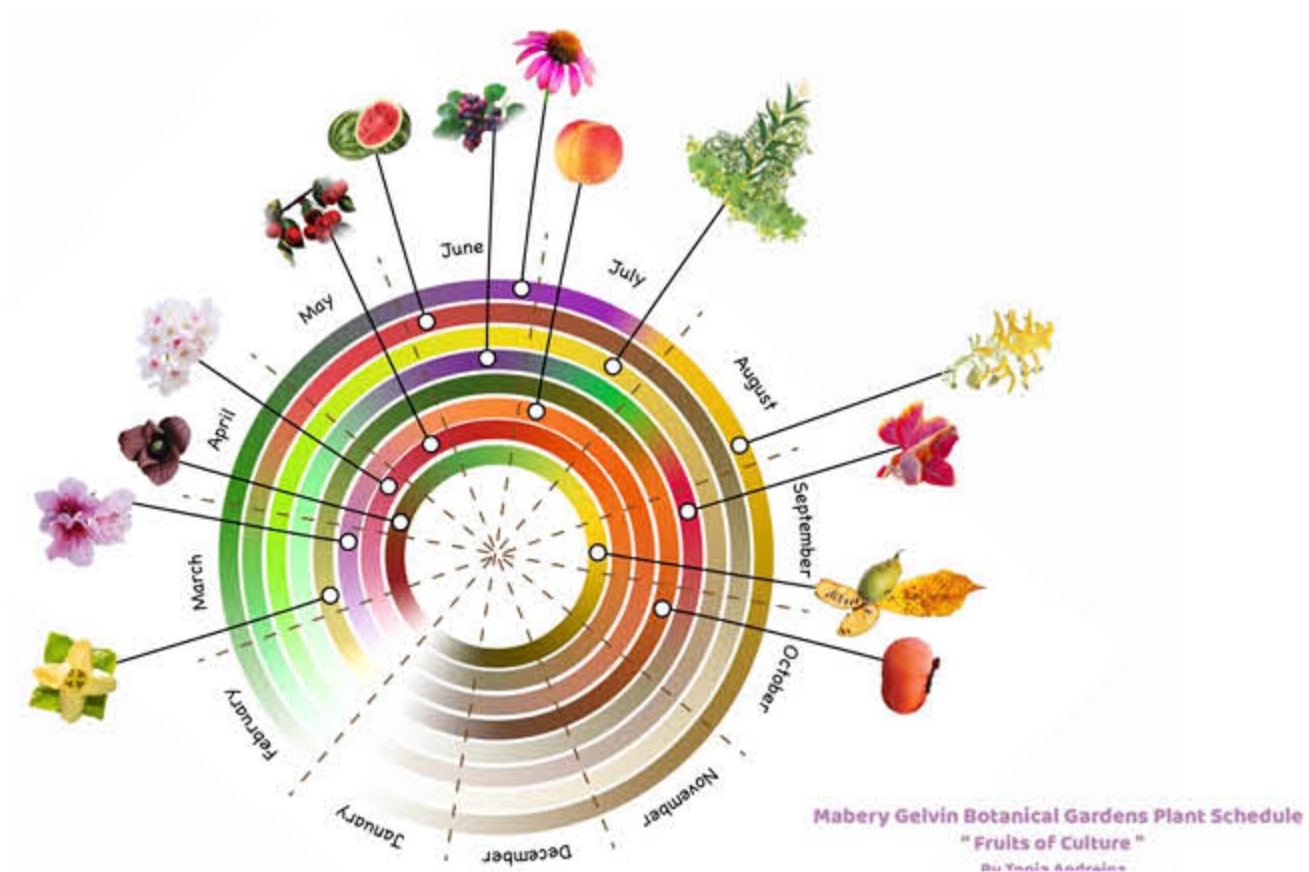
The Lorax Garden at Bourbonnais Upper Grade Center will encourage whimsy and play with an interesting, multifunctional tree selection that increases access to fresh, healthy regional fruits.

by Tonia Andreina



	Spring	Summer	Autumn	Winter
Drum Circle Mound Outdoor Classroom		Trumpet Vine	Sweet Autumn Clematis	
Flower (Pollinator) Power Increased Fruit Yield			Agastache	Big Blue Stem
			Monarda	
			Butterfly Weed	
			Purple Prairie Clover	
	Cherry	Anonia	Kankakee Mallow	
			Pawpaw	
Food Forest Healthy Food Access	Peach	Honeyberry	Juneberry	
		Wild Ginger		
	Wild Violet			Cattail
Sedge Meadow Revival Water Filtration		Club Sedge	Common Wood Sedge	
			Pennsylvania Sedge	Tussock Sedge





Fruits of Culture, Champaign, IL Park Fragmentation Resolved, Growing Global Food (Academic)

Generations of landscape design resulted in an incohesive site experience. Scattered across the park are a Japanese rock garden with red bridge and coy pond, a colonial wagon and various patches of annual and perennial plant arrangements.

Design intervention includes a largely perennial arrangement of culturally themed zones, united by a cohesive path system.

Each area is planted in site appropriate species selection; paw paws multiply in the lowest area on site reminiscent of its native bottomland conditions, for example.

A light-shade analysis determines the best location for an annual sun-loving watermelon patch. Native prairie flowers unify the entire central axis, framing all major walk ways allowing for four-season interest and a sense of continuity.

Perspectives illustrate the user experience through a savanna type biome facilitated by blooming groundcovers framing the existing wooded border.

