

MASTER PLAN EXECUTIVE SUMMARY

August 18, 2011



Mansfield Community Park + Nature Preserve

Mansfield, Texas



MANSFIELD COMMUNITY PARK + NATURE PRESERVE | Mansfield, Texas
Master Plan Executive Summary | August 18, 2011



MITHUN
Geo-Marine, Inc.
Peloton Land Solutions

© Mithun
Pier 56 1201 Alaskan Way Seattle WA 98101
206.623.3344 mithun.com

gettyimages



INTRODUCTION

EXECUTIVE SUMMARY
PROJECT TEAM PARTICIPATION
DESIGN PROCESS AND SCHEDULE

VISION

VISION, GOALS AND PROGRAM

THE SITE

REGIONAL ECOLOGICAL PATTERNS
REGIONAL DEVELOPMENT PATTERNS
REGIONAL AND SITE HISTORY
SITE TRANSFORMATION PATTERNS
EXISTING SITE CONDITIONS
OPPORTUNITIES AND CONSTRAINTS
SITE HYDROLOGY AND FLOOD ZONES
SITE VEGETATION AND HABITAT TRANSECT
SITE CLIMATE ANALYSIS
SITE CONNECTIVITY

CONCEPT DEVELOPMENT

OPTION A: DISCOVERY LOOP
OPTION B: WATERSHED NODES

MASTER PLAN

PREFERRED CONCEPT : WATERSHED PRESERVE
MASTER PLAN
SITE TRANSECT WALKS
LAYERED SPACES - CONCEPTUAL SECTION
DESIGN PROCESS AND SCHEDULE
USER EXPERIENCES
PRELIMINARY PROGRAM AND BUDGET PROJECTIONS



Executive Summary:

The Master Plan for the Mansfield Community Park and Nature Preserve creates a sustainable and lasting framework to connect future generations of visitors to the rich cultural and natural history of the diverse 80 acre Oliver-Williams property along Walnut Creek. This will be a place, as Mr. Williams described, to “*jump the fence from society*”, and to gather, learn and connect people and place.

Crafting a Master Plan

The City of Mansfield, realizing the robust potential of the Oliver-Williams property along Walnut Creek, selected Land Design Partners and Mithun to help evaluate the site to determine its potential for a passive, nature-based recreation and educational experience for a wide range of users.

After initial meetings with City Leadership to outline process and schedule, the design team proceeded along concurrent paths of site analysis, cultural and archaeological research, and engagement with community stakeholders to understand the vision and needs for this important project.

Analysis of existing and past conditions on the site allowed the design team to weigh the physical capacity of the site for varied program uses, and also to consider the important cultural elements of the site and region that will be an integral part of the user experience.

Engagement with varied and passionate stakeholders provided a clear and aligned vision for this site and project - to create a passive nature based experience that celebrates both the historical legacy of

the site and region, but also connects people to the natural systems of this place. Ultimately, the visioning sessions illustrated the range of future users, and the importance of creating varied experiences and universal access, where possible, to accommodate a shared and inviting experience. A list of stakeholders included in these visioning sessions is reflected on the following page. Of the many voices that the design team heard in this process, the Oliver-Williams family generously offered their insight, memory, and hope for this property, which they have cherished and guarded for many years. Mr. William’s vision of a place where “*roamings end*” and where one could “*jump the fence from society*,” will hopefully be shared by current and future generations on this property.

In concert with the visioning sessions, the design and leadership team also researched complimentary regional facilities to learn successes and challenges from other communities, and to understand how the Mansfield Community Park and Nature Preserve can fit into the larger spectrum of regional community resources.

Facilities visited in the benchmarking tour included the Trinity Audubon Center, The Heard Museum and the River Legacy Park Living Science Center. All of these facilities and their directors and staff provided valuable insight to the team in the design process.

With this research, analysis and programmatic foundation in place, the design team explored a series of options for the site and future building program that were tested and discussed with the leadership team. Ultimately, the preferred option of creating an interwoven neighborhood park and more immersive nature preserve was developed, and is reflected in the following pages.

The intent of this master plan is to create a framework to guide a phased and sustainable implementation of this exciting vision.





LEADERSHIP TEAM

City of Mansfield Parks and Community Services
Hillary Hodges,
Shelley Lanners
Toby Fojtik
Andy Binz

Mayor
David Cook

Mansfield City Council

Mansfield Park Facilities Development Corporation

CONTRIBUTING STAKEHOLDERS

Cedar Hill State Park
City of Arlington
City of Grand Prairie
City of Mansfield Council/Board Alumni
City of Mansfield Parks and Community Services
City of Mansfield Staff
Mansfield Chamber
Mansfield Civic Organizations
Mansfield Community Residents
Mansfield Historical Society
MISD Staff
MISD Students
Oliver-Williams Family Members
NCTCOG-BPAC
Texas Trails Network
US Army Corp of Engineers

DESIGN TEAM

Team Leader
Land Design Partners
Philip Neeley, ASLA
Elizabeth McIlrath, ASLA
Henry Hartshorn, ASLA

Lead Design
MITHUN
Brendan Connolly, AIA
Deb Guenther, ASLA
Phoebe Bogert

Wildlife Biologist
Peloton Land Solutions
Randy Alexander, CWB

Archaeological + Cultural Research
Geo-Marine
Melissa Green, RPA
Marsha Prior, Ph.D.

DESIGN PROCESS + SCHEDULE

Land Design Partners, Mithun and other design team consultants have engaged in site research and analysis, as well as a series of visioning sessions with diverse stakeholders to help provide an informed foundation for design and planning for the Williams Property. Listening to stakeholders and importantly, listening to the site, is a fundamental part of this process that has helped provide a solid foundation of understanding to develop concept options and the final preferred master plan.



Field Trip with City Council, Park Board and City Staff - October 21, 2010



Site Visit with Various City Staff and Others - January 27, 2011



DESIGN PROCESS TIMELINE + SEQUENCE

Vision

As the City’s crown jewel of parks, Mansfield Community Park will be an enduring living resource that preserves the natural and cultural history of Mansfield for future generation’s enjoyment and education

Goals

- Provide sanctuary from the urban environment
- Allow visitors immersion in the wonder of nature
- Promote environmental stewardship through all programs and facilities
- Create nature-based education opportunities for students of various ages
- Preserve the unique legacy & memories of the Williams family – a place where “Roamings End”

Program

Suggested Activities Program

- Walking/hiking/strolling/jogging
- Bicycling (Walnut Creek greenbelt connection)
- Bird-watching
- Nature photography
- Reading/meditation
- Exploring/discovery
- Family outings
- Group gatherings
- Picnicking
- Fishing
- Scavenger hunts
- Student fieldtrips & education
- Nature learning/research
- Water testing/quality
- Creek hydrology/flooding
- Night learning/telescopes
- Geocaching
- Fort building/“loose parts” concept
- Alternative energy demonstration
- Plant identification
- Wildlife identification
- Community gardening
- Day camp activities
- Summer camp activities (overnight)
- Learning history of Mansfield – people, farming, lifestyles, leisure, etc.
- Learning Williams family history
- Stewardship/restoration

VISION, GOALS, PROGRAM

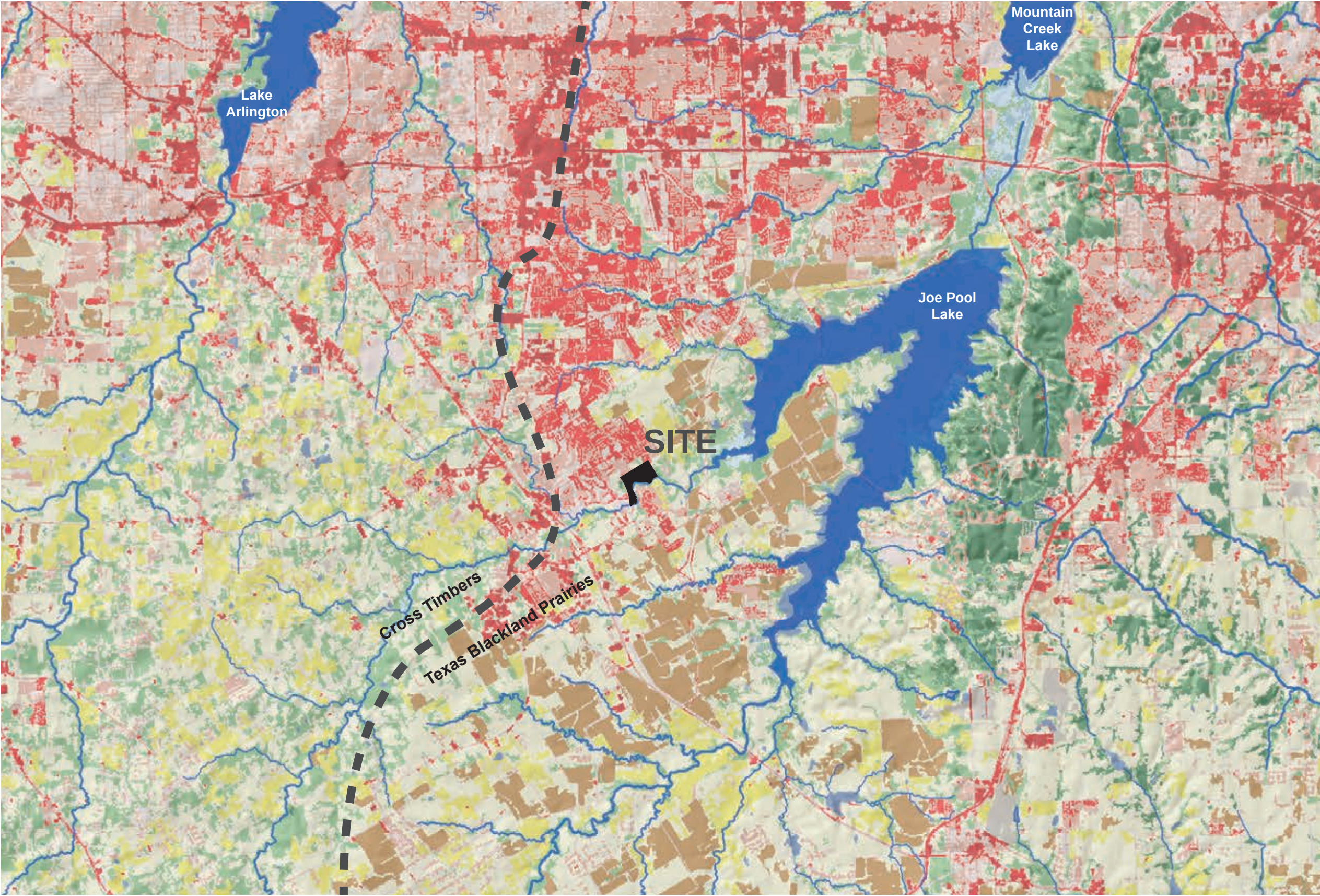
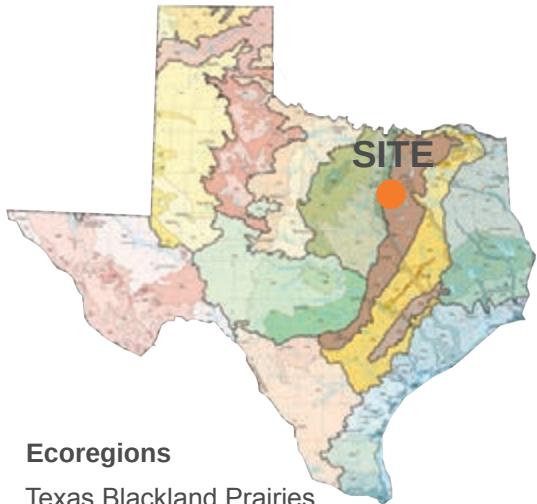
Suggested Facilities Program (Built Elements)

- Entry & roadway access
- Parking (low impact)
- Trails (various types)
- Interpretive stations
- Low water crossing(s)
- Pedestrian bridge(s)
- Benches/seating
- Picnic areas
- Pavilion(s)
- Wayfinding/signage
- Waters edge boardwalk/overlook
- Treehouse
- Windmill
- Log cabin
- Restrooms
- Natural amphitheater
- Outdoor classroom(s)
- Covered outdoor gathering space
- Low-impact lighting
- Environmental learning center
- Admin/reception/lobby
- Staff space
- Indoor classroom
- Wet lab
- Interpretive exhibit space (indoor and possibly outdoor)
- Meeting room
- Flexible rental space
- Small staff/support kitchen
- Gift shop/concessions
- Restrooms
- Storage
- Mechanical
- A/V server space
- Visiting faculty/staff/docent space (storage/informal staging/lounge space)



REGIONAL ECOLOGICAL PATTERNS

This region contains a strong diversity of landscapes and use patterns, which have dynamically evolved over many generations of settlement and use. The Williams Property is part of the unique intersection between the Cross Timbers and Texas Blackland Prairie ecoregions, which has helped to contribute to the diversity of plant and wildlife species evident on the site.



LEGEND
Land Cover (2001)

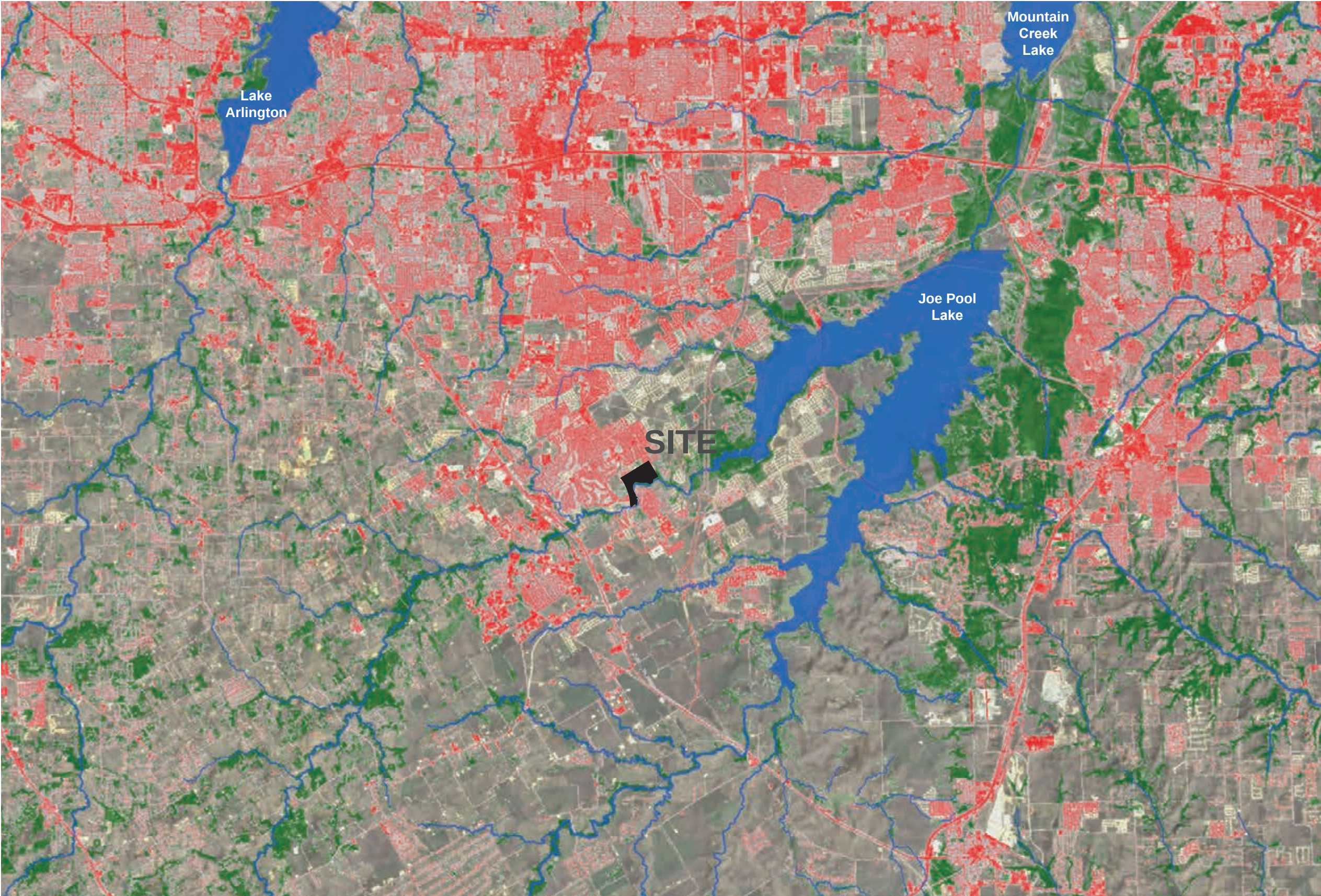
High Intensity Development	Medium Intensity Development	Low Density Development	Evergreen Forest	Deciduous Forest	Pasture/Hay	Cultivated Crops
----------------------------	------------------------------	-------------------------	------------------	------------------	-------------	------------------

Site

scale: 1"=15,000'



REGIONAL DEVELOPMENT PATTERNS



The Walnut Creek corridor occupies a critical location along one of the main hydrologic connections to Joe Pool Lake. This analysis emphasizes the importance of these major and minor riparian corridors in preserving tree canopy coverage and habitat, and preserving these resources from encroaching patterns of regional impervious development.



Trinity River Basin

LEGEND

Land Cover (2001)

- Impervious Surfaces
- Canopy Coverage
- Site

scale: 1"=15,000'

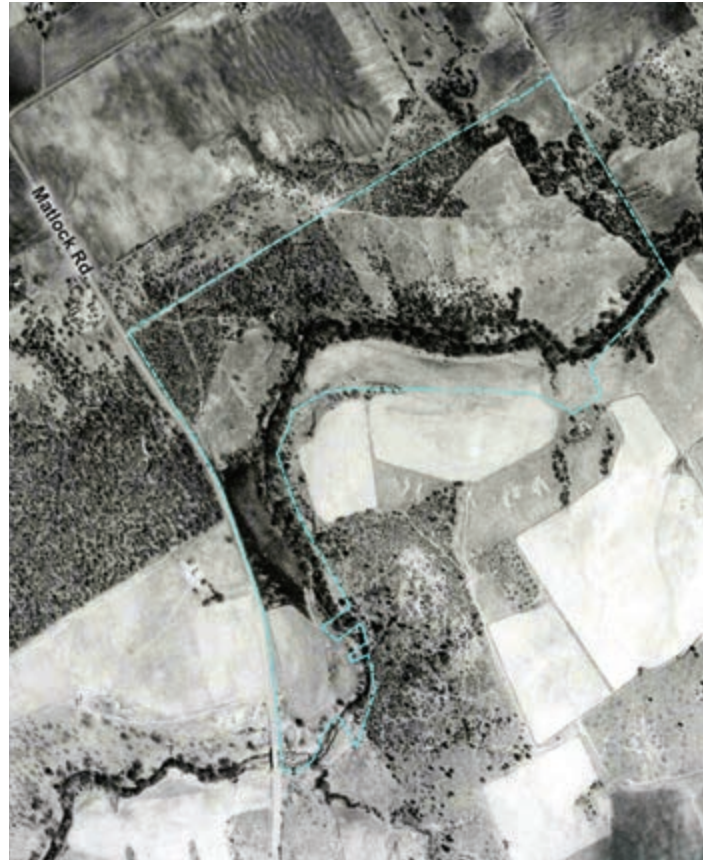


REGIONAL AND SITE HISTORY

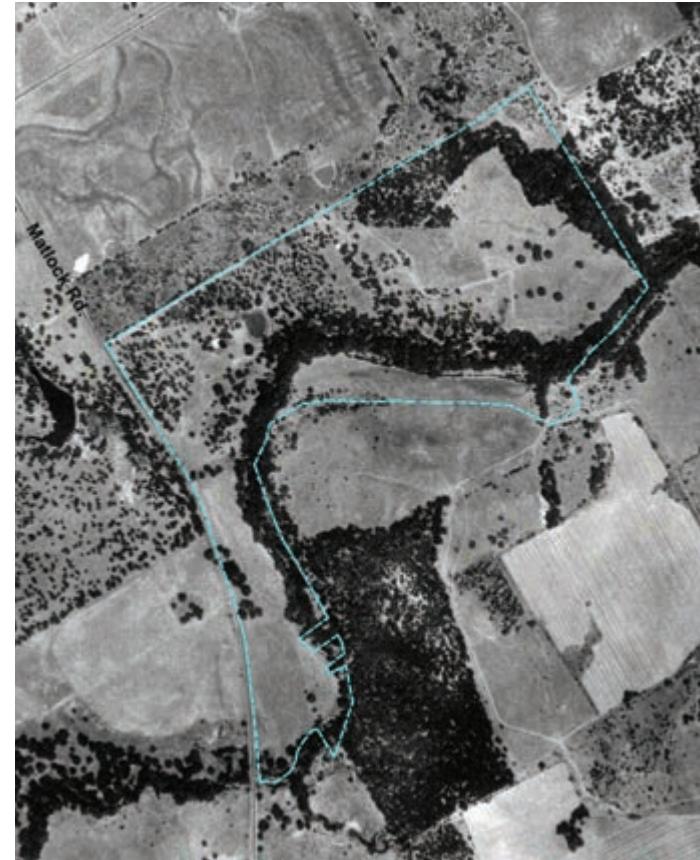
This historic map depicting early development in Mansfield serves as an initial look into the historic research portion of this important city project. Throughout the master planning process, the design team has engaged in cultural research, interviews and investigations. Documentation of cultural finds and items of historical significance present the opportunity to tell a story which will serve as a legacy to Mansfield citizens both past and future.



SITE TRANSFORMATION PATTERNS



1942



1964



1984

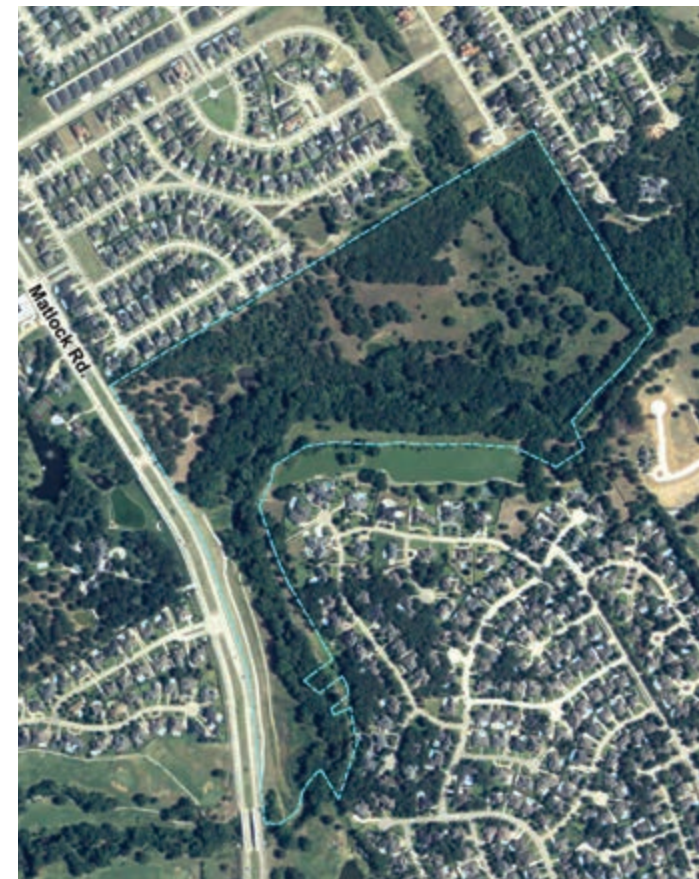
The Williams Property has seen rapid transformation of human and natural habitat over recent decades. This elapsed aerial view illustrates the dynamic nature of the project site surroundings. These diagrams emphasize the importance of the Williams Property in preserving and enhancing native landscape in the context of change.



1995



2004



2008



Site Aerial View

EXISTING SITE CONDITIONS

The Williams Property represents 80 acres of wooded and grassland landscape along Walnut Creek, and has been a pivotal part of the strong Williams family history here. This property has the potential to be a nature-based centerpiece of Mansfield's park system, and a place to connect citizens to their local history and natural resources.



Gateway + Access



Meadow Rooms





Ecological Zones

OPPORTUNITIES AND CONSTRAINTS

The Williams property contains a diverse variety of wildlife and habitats and important cultural / historic site remnants. This 80 acre site also contains natural rooms & unique land features within the property boundaries, and allows visitors an immersive site experience that is experientially buffered from its surroundings. Approach, arrival, connectivity and immersion in the varied landscape spaces within the property will be important opportunities for this project. Ultimately, this project can create an experience where Mansfield citizens and other visitors can enjoy exploring and learning in the beautiful natural environment.



Site Images

LEGEND

 Existing Property

 Watercourse

 View Opportunity

 Significant Feature

 Access Opportunity



Site Flood Zones

SITE HYDROLOGY + FLOOD ZONES

Hydrology plays a fundamental role in shaping the topography, habitat and past and future uses of the Williams Property. Of the 80 acres of property, the opportunities for buildings and landscape structures need to carefully consider the fluxuations of seasonal storm events and avoid sensitive habitat areas that are aligned with hydrologic patterns on the site. Walnut Creek is also a conduit for habitat and connectivity to the larger ecoregion, and can be a powerful story to tell through this project.



Rocky Ford

SITE VEGETATION + HABITAT TRANSECT

The Williams property contains a rich diversity of habitat zones for both plant and animal life that will offer key educational opportunities for natural interpretation and nature based user experiences. This transect represents a portion of these zones represented in the overall Williams property.

Post Oak Woodlands

A distinctive vegetation type on the site — characterized by post oaks, cedar elm, and eastern red cedar with an open understory with coralberry, greenbrier, and several grass species including wildrye, sideoats grama, and silver bluestem. The trees and understory create an inviting space often at site highpoints with dappled sunlight and a sense of prospect.

Pecan Bottomland

The pecan bottom is a distinctive site feature. The community is dominated by large pecan trees. The understory is mowed periodically, but consists of wildrye, bermudagrass, woodoats, Johnsongrass, and greenbrier. The pecan bottom provides an important source of food for wildlife.

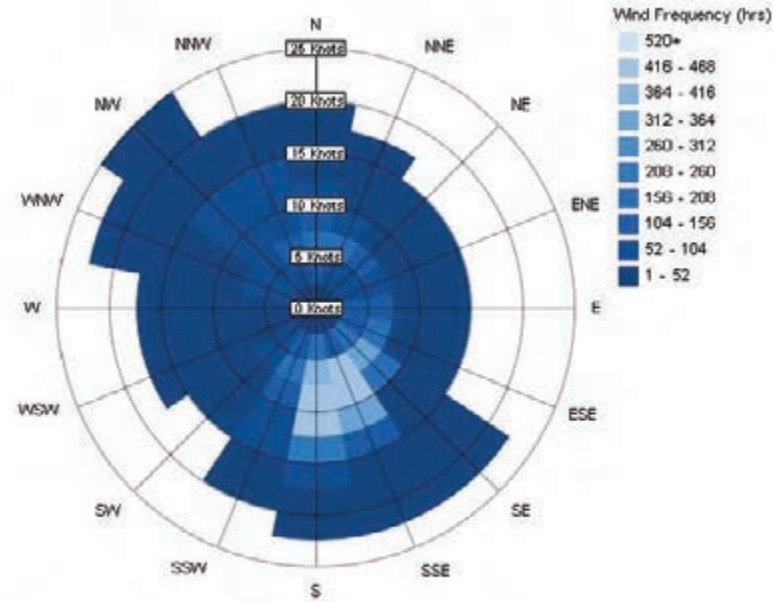
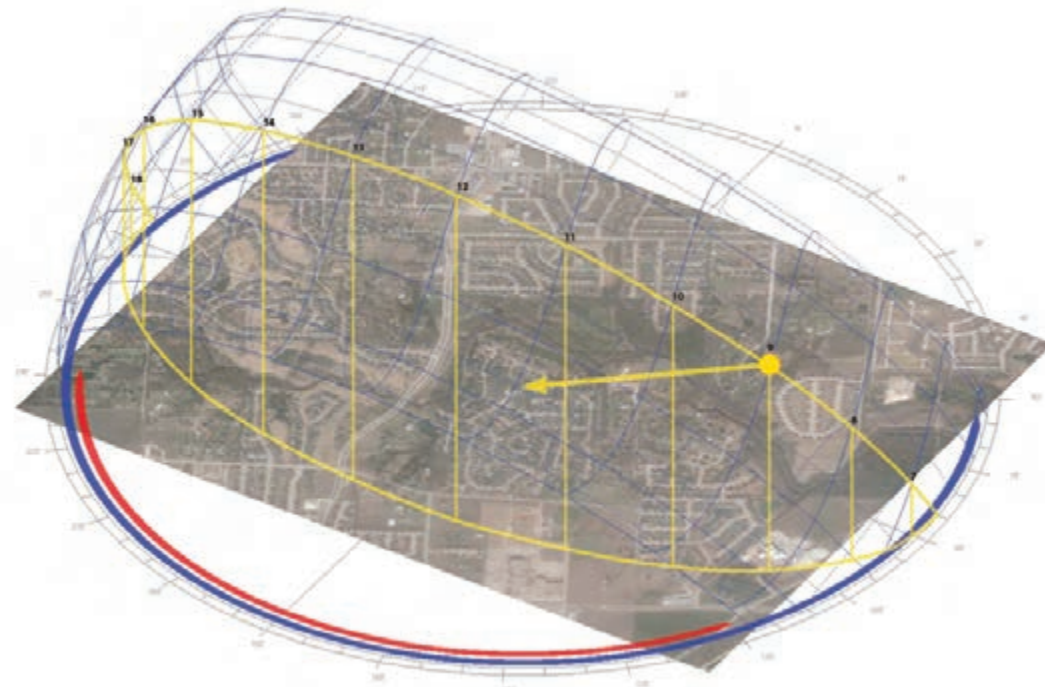
Oak | Elm Woodland

The oak-elm woodland dominates a large part of the site both, primarily along the riparian corridors of the property. This community is broadly defined by a prevalence of cedar elm, post oak, American elm, hackberry, and Shumard's oak. The understory in this community is fairly thick with greenbrier, poison ivy, coralberry, yaupon, woodoats, and Canada wildrye. This community serves as a significant travel corridor for wildlife species, both within the site and to habitats up and downstream of the property along Walnut Creek. The woodland provides cover and food to a large number of songbirds, small mammals such as coyote, bobcat and beaver, as well as amphibians and reptiles such as red-eared sliders and bullfrogs.

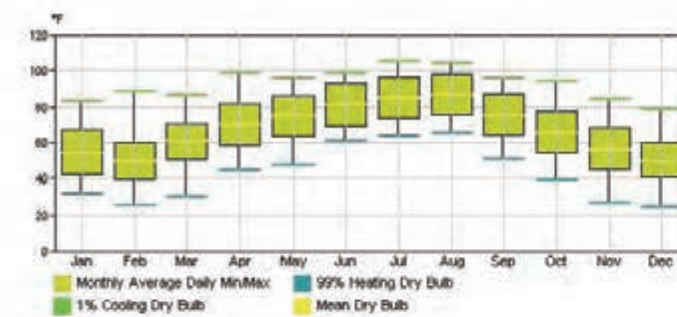
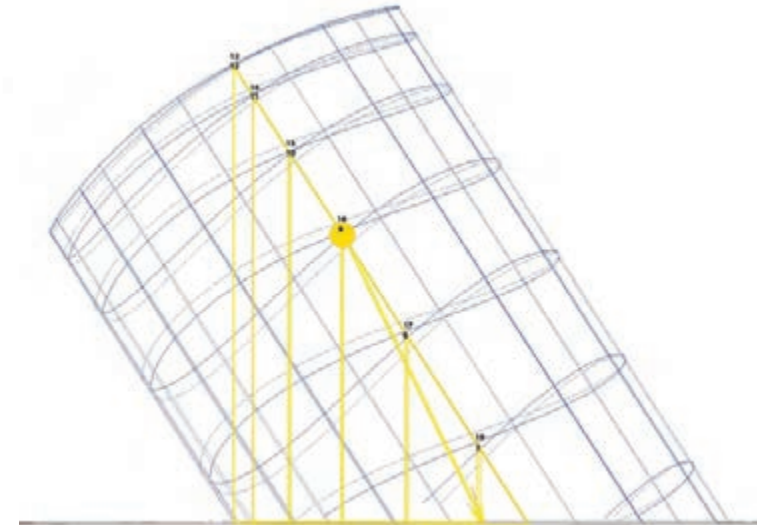


SITE CLIMATE ANALYSIS

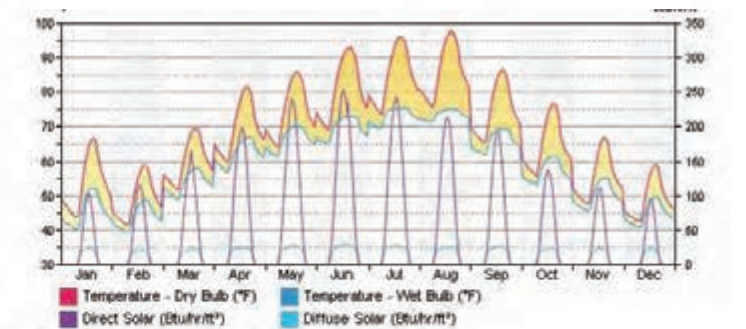
Understanding regional and microclimate patterns of the site will enable a holistic and sustainable approach to the design of landscape and architectural spaces, and evaluate opportunities for sustainable site and energy strategies for site and building systems. The diurnal temperature ranges below, for example, suggest the potential importance of thermal mass in the building design.



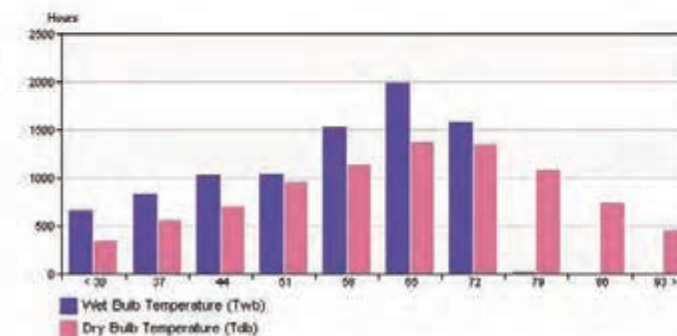
Annual Wind Rose (Frequency Distribution)



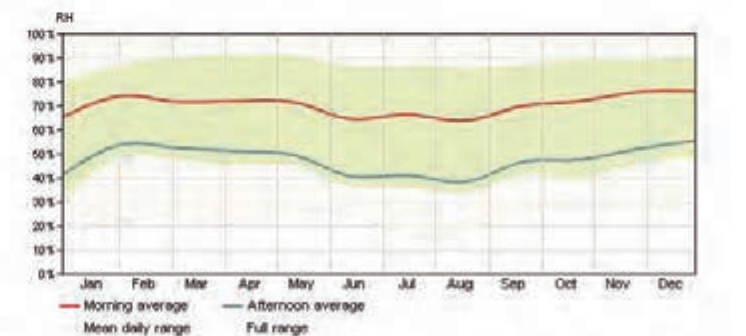
Monthly Design Data



Diurnal Weather Averages



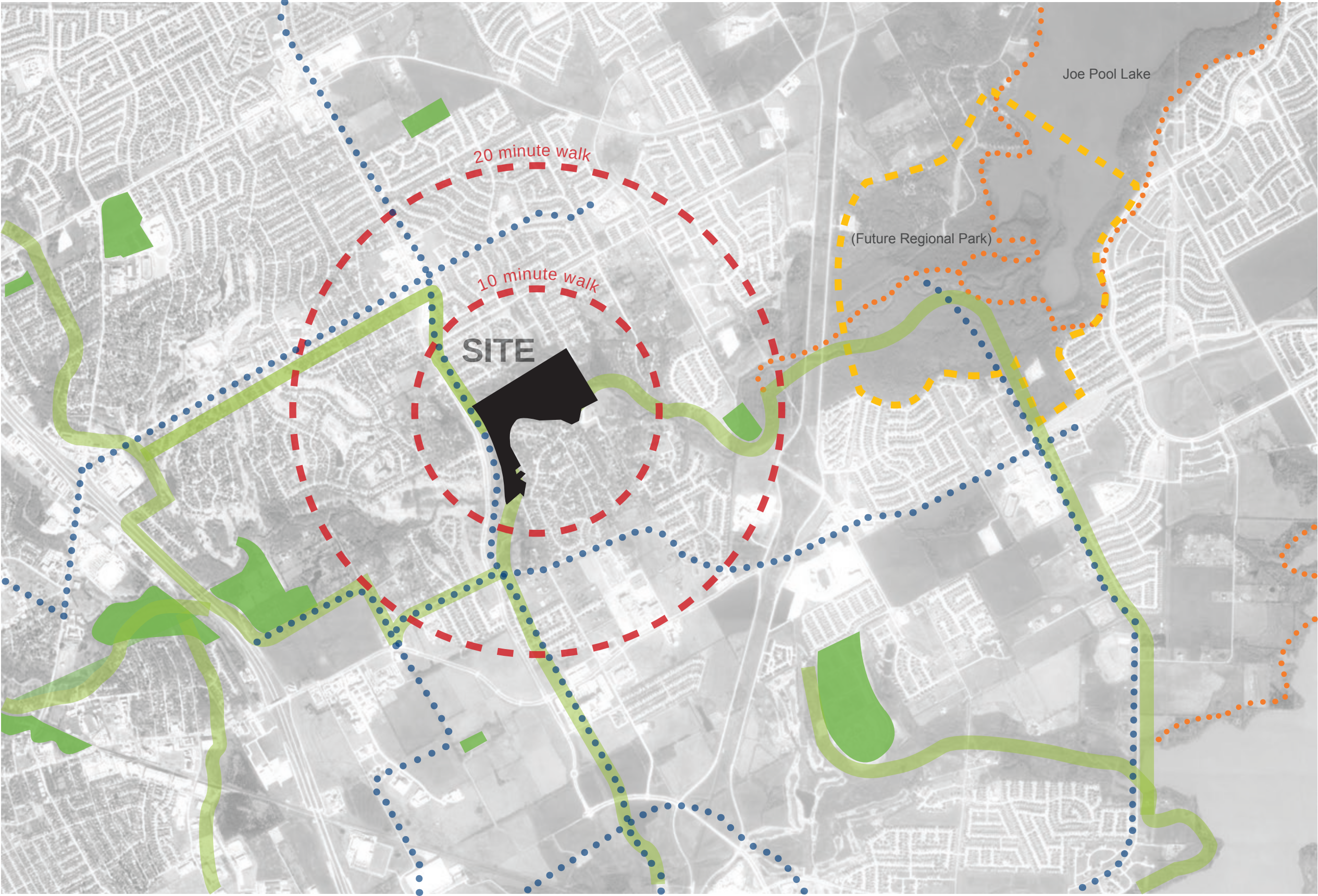
Annual Temperature Bins



Humidity

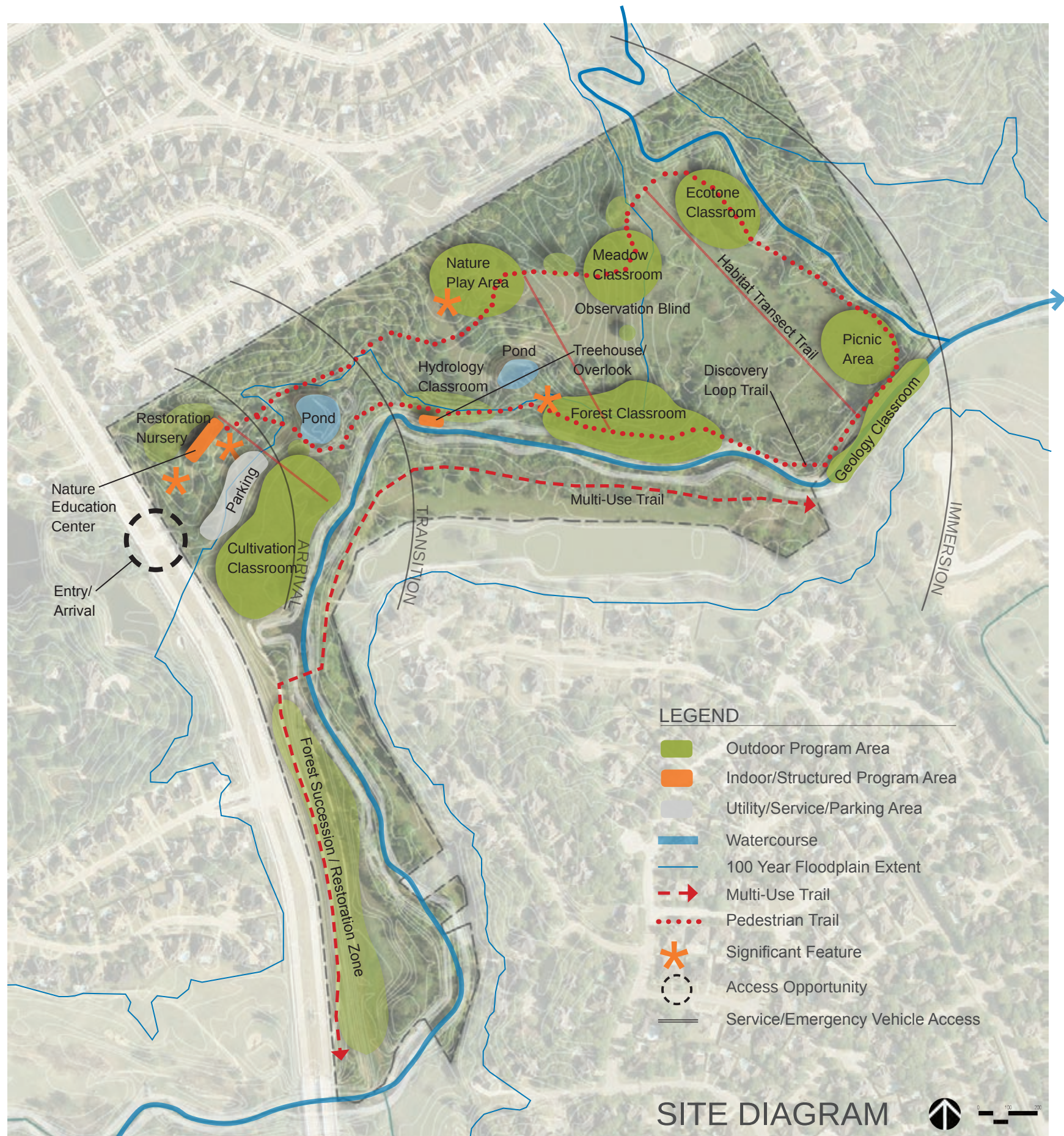
SITE CONNECTIVITY

Connections to other Mansfield resources and community amenities is an important consideration for this project and process. Additionally, neighboring communities such as Arlington and Grand Prairie are both potential stakeholders and beneficiaries of this facility, and these larger scale relationships offer unique opportunities for Williams Property and other long range planning aspirations of Mansfield.



LEGEND

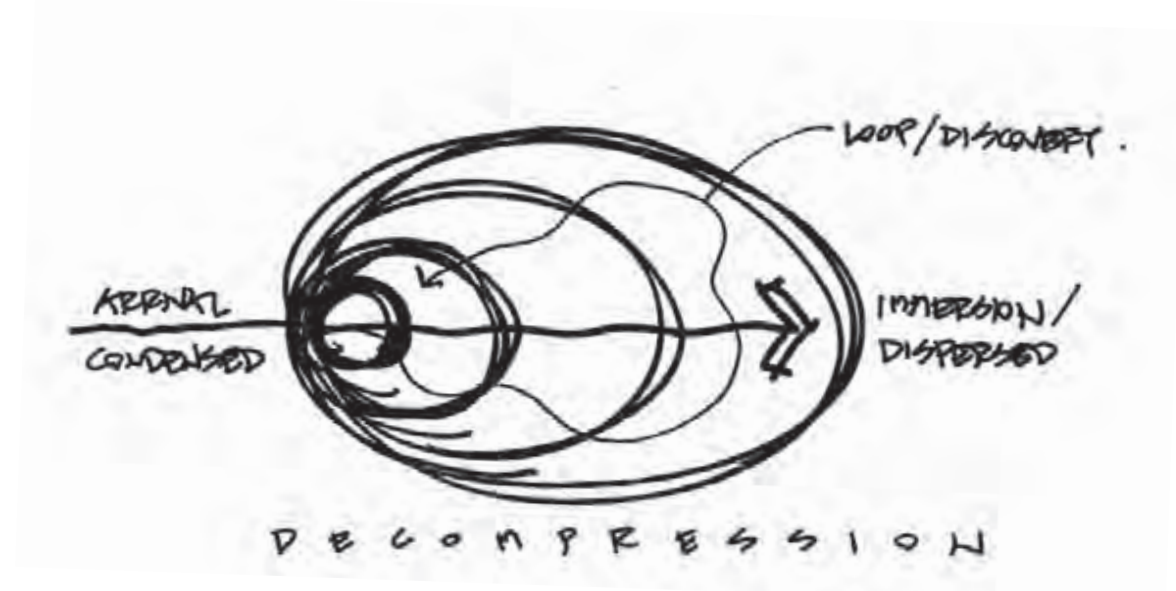
- Spine Trail
- Existing Parks
- Regional Trail Connection
- Regional Park (Potential)
- Distance radii
- Bike Routes



CONCEPT OPTION A : DISCOVERY LOOP

Recalling early agrarian patterns of development, this concept situates arrival, facilities and other development infrastructure close to the arrival point. This concentration of the developed portions of the park and nature center to the west edge of the site allow the balance of the Williams property to serve as a passive series of outdoor activity areas, all linked by a pedestrian loop trail. The future multi-use trail to connect to the Mansfield greenway system would compliment this pedestrian loop on the southern edge of Walnut Creek. Some attributes of this concept include the following:

- FOREST ECOSYSTEM EMPHASIS
- HISTORICAL AGRARIAN PATTERNS
- GRADATION OF EXPERIENCE
- FOREST SUCCESSION + RESTORATION
- PEDESTRIAN LOOP EXPERIENCE

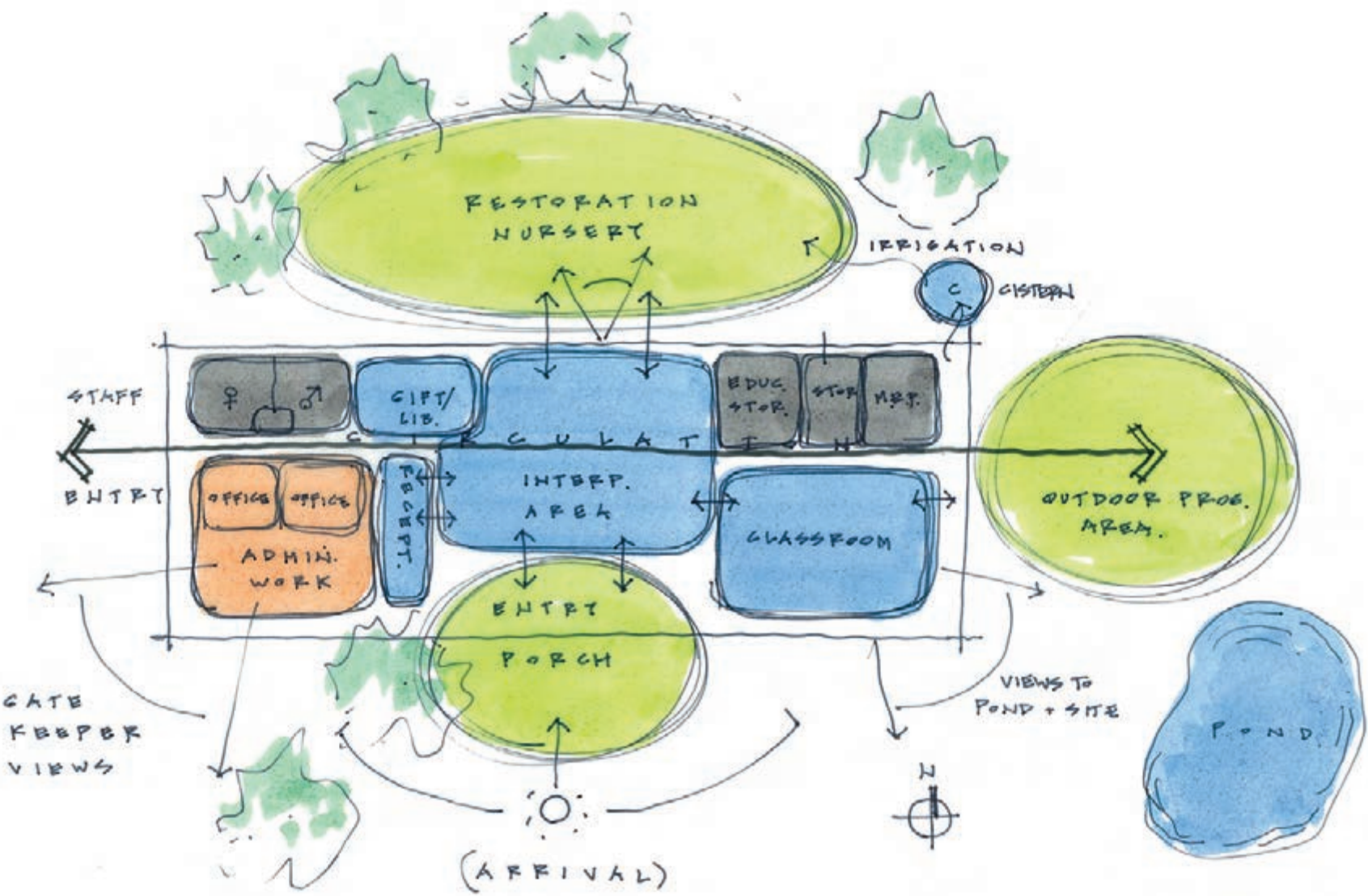


CONCEPT DIAGRAM

CONCEPT OPTION A : DISCOVERY LOOP

DRAFT NATURE CENTER BUILDING PROGRAM

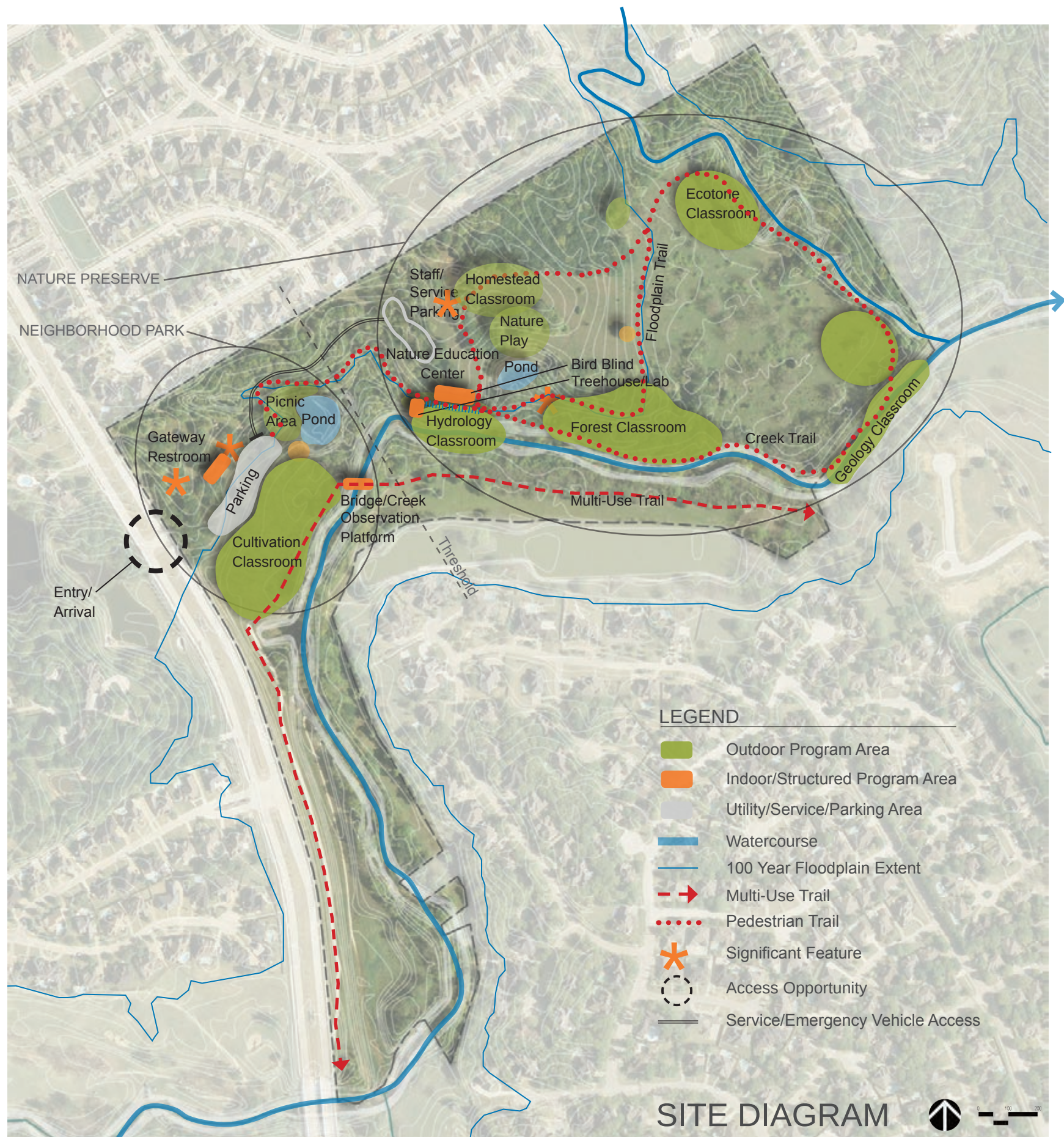
use	program area	qnty.	subtotal	notes
indoor program areas				
reception station/POS	150			proximity to open work areas/conf.
gift shop/bookstore	250			POS combined with reception/near interp./entry
private offices (large)	210	1	210	director/FTE/TBD
private offices (med)	150	1	150	assistant/partial FTE/TBD
open office admin area (workstations)	160	2	80	docent storage?
copy/mail room	100			HVAC exhaust separately
classroom	800			views to garden/outdoor access. Possible wet-lab?
conference (med)	375			4-8 people, small group. Near admin?
docent storage/area	50			purse/bag storage, personal items, near kitchenette
network/server/av/lighting controls	150			HVAC control zone, heat capture?
kitchenette	150			near admin area/docent area
restrooms	500			2 wc per sex - possible stand-alone ext. access? Compost (req. access below)
janitor closet	20			
shower/changing room	50			unisex proximity to bike stor/staff entry/5% of building occupants = 2 people
trash/recycling/compost area	50			near kitchenette
indoor educator storage area	400			near interp./classroom
outdoor educ storage/tool storage	400			TBD
exhibition/interpretive space	1,200			include lobby/entry space
walls and circulation, M&E	1,808	26%		Mech room, elec. room, fire sprink control access, etc.
total gross building area	6,973			consider future expandability, growth - esp. admin and classroom areas.
outdoor program areas (near nature ctr.)				
bike storage area (exterior/covered)	50			covered porch area
outdoor gathering area (sheltered/porch)	500			benches/tables? could be in covered porch area
outdoor classroom area	1,000			informal teaching space
nursery/garden	1,000			near classroom, south light
exterior handwashing/outdoor cleanup area				
dumpster/recycling/service area (screened)	300			near kitchen/admin area
parking	11,250	30	375	30 cars/bus parking TBD?
rainwater collection cistern	100			near nursery/garden



OPTION A : BUILDING PROGRAM DIAGRAM

- OPTIMUM SOLAR ORIENTATION / DAYLIGHT HARVESTING
- STRONG RELATIONSHIP TO OUTDOOR PROGRAM AREAS
- VISUAL CONNECTION TO SITE ENTRY
- ROOF/CISTERN RAINWATER COLLECTION
- COVERED/SHADED PORCH AREAS

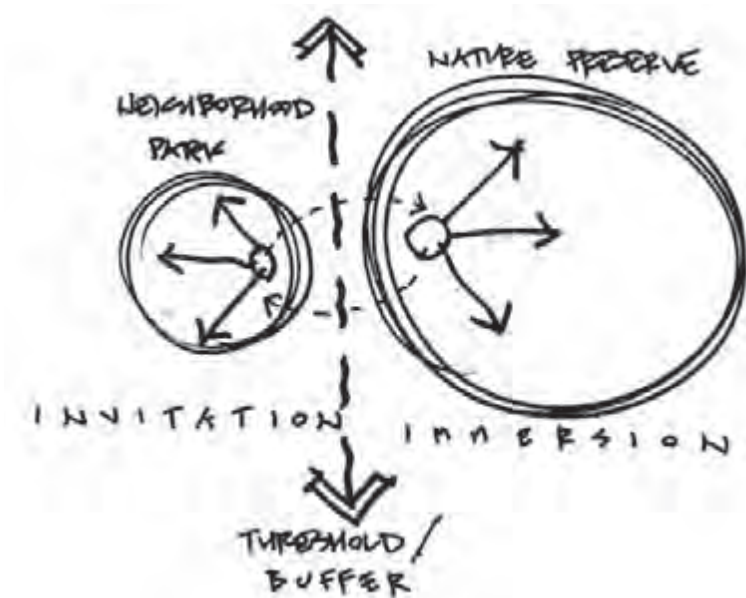




CONCEPT OPTION B : WATERSHED NODES

This option intentionally creates two connected, yet separated, zones within the property to allow for both a convenient neighborhood park resource and a more immersive nature center and preserve experience toward the east. The eastern zone allows for convenient access to picnic areas and restroom facilities from the parking area. Creating a more intentional separation between car and visitor experience, the Western zone links users to the nature education center and inner “rooms” of the site through an experiential pedestrian trail that ultimately connects all of the learning nodes of the site ringing the creek and large meadow along the 100 year floodplain extents. The pedestrian experience is drawn in the vertical plane, from creekbed to riparian edge to meadow to tree canopy above. Some attributes of this concept include the following:

- 2 PARKS - INNER AND OUTER ZONES
- ENGAGEMENT WITH SITE HYDROLOGY
- HEART OF THE SITE / HISTORIC HOMESTEAD
- BUFFERED PEDESTRIAN EXPERIENCE

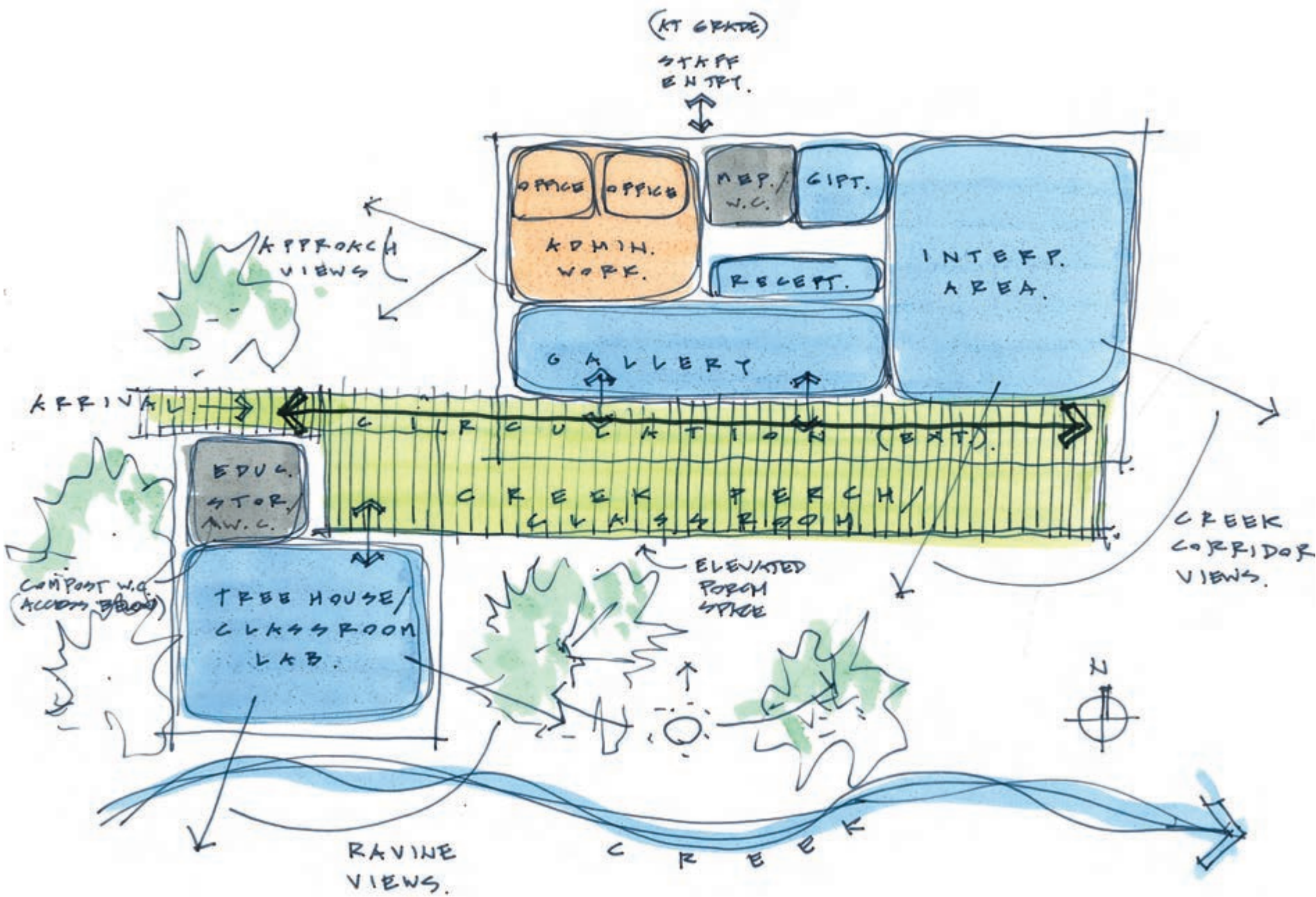


CONCEPT DIAGRAMS

CONCEPT OPTION B : WATERSHED NODES

DRAFT NATURE CENTER BUILDING PROGRAM

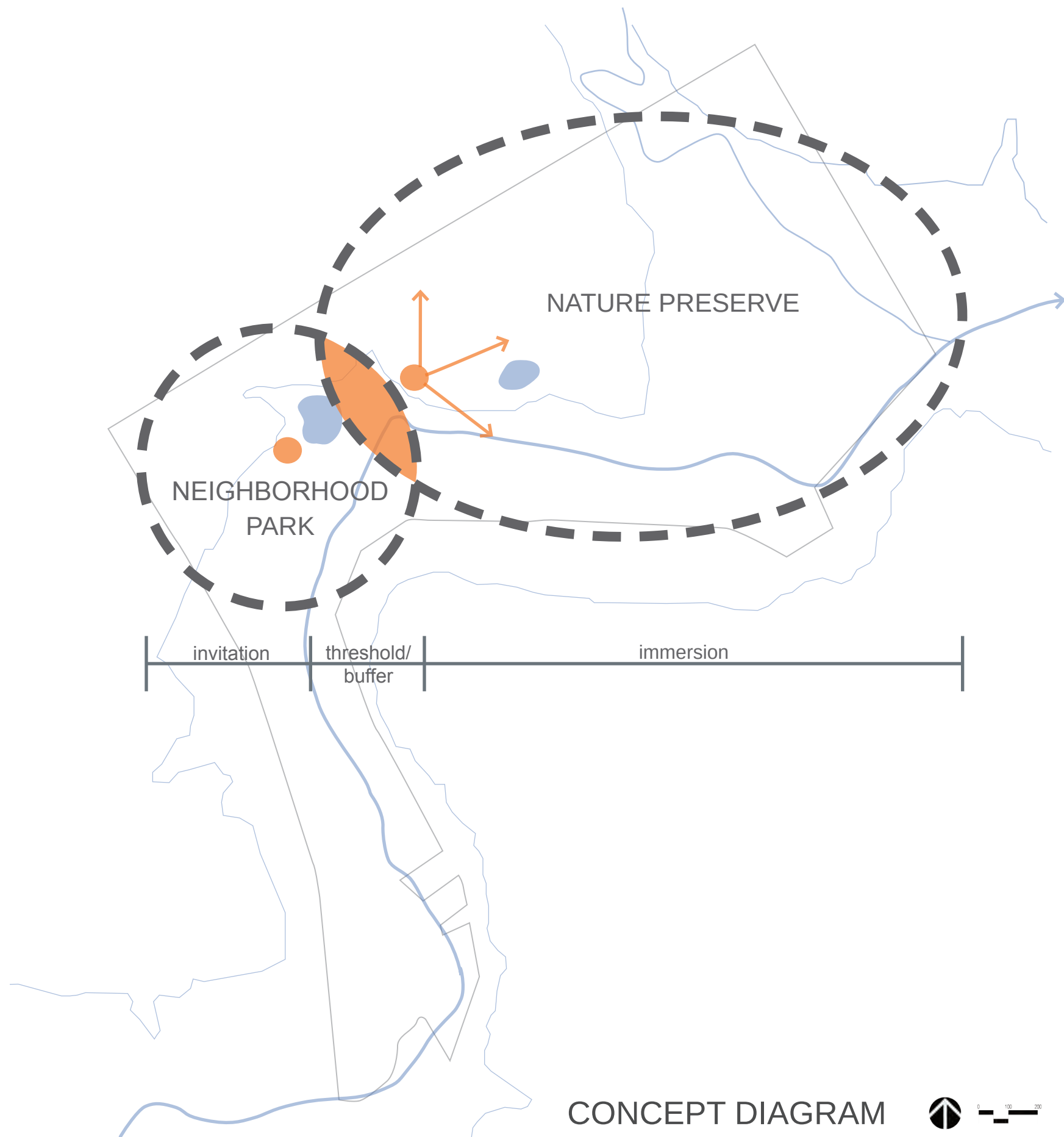
use	program area	qty.	subtotal	notes
indoor program areas				
reception station/POS	150			proximity to open work areas/conf.
gift shop/bookstore	250			POS combined with reception/near interp./entry
private offices (large)	210	1	210	director/FTE/TBD
private offices (med)	150	1	150	assistant/partial FTE/TBD
open office admin area (workstations)	160	2	80	docent storage?
copy/mail room	100			HVAC exhaust separately
classroom	800			views to garden/outdoor access. Possible wet-lab?
conference (med)	375			4-8 people, small group. Near admin?
docent storage/area	50			purse/bag storage, personal items, near kitchenette
network/server/av/lighting controls	150			HVAC control zone, heat capture?
kitchenette	150			near admin area/docent area
restrooms	500			2 wc per sex - possible stand-alone ext. access? Compost (req. access below)
janitor closet	20			
shower/changing room	50			unisex proximity to bike stor/staff entry/5% of building occupants = 2 people
trash/recycling/compost area	50			near kitchenette
indoor educator storage area	400			near interp/classroom
outdoor educ storage/tool storage	400			TBD
exhibition/interpretive space	1,200			include lobby/entry space
walls and circulation, M&E	1,808	26%		Mech room, elec. room, fire sprink control access, etc.
total gross building area	6,973			consider future expandability, growth - esp. admin and classroom areas.
outdoor program areas (near nature ctr.)				
bike storage area (exterior/covered)	50			covered porch area
outdoor gathering area (sheltered/porch)	500			benches/tables? could be in covered porch area
outdoor classroom area	1,000			informal teaching space
nursery/garden	1,000			near classroom, south light
exterior handwashing/outdoor cleanup area				
dumpster/recycling/service area (screened)	300			near kitchen/admin area
parking	11,250	30	375	30 cars/bus parking TBD?
rainwater collection cistern	100			near nursery/garden



OPTION B : BUILDING PROGRAM DIAGRAM

- OPTIMUM SOLAR ORIENTATION / DAYLIGHT HARVESTING
- STRONG RELATIONSHIP TO CREEK CORRIDOR
- PROSPECT VIEW ALONG RAVINE
- BUFFERED TREEHOUSE/CANOPY EXPERIENCE
- COVERED/SHADED PORCH AREAS
- FLEXIBLE SEASONAL USE/ACCESS





CONCEPT DIAGRAM

MANSFIELD COMMUNITY PARK + NATURE PRESERVE | Mansfield, Texas
Master Plan Executive Summary | August 18, 2011

PREFERRED CONCEPT: WATERSHED PRESERVE

This site concept intentionally creates two connected, yet distinct, zones within the property to allow for both a convenient neighborhood park resource and a more immersive nature center and preserve experience toward the east. The western zone allows for convenient access to picnic areas and restroom facilities from the parking area. Creating a more intentional separation between car and visitor experience, the eastern zone links users to the nature education center and inner “rooms” of the site through an experiential pedestrian trail that ultimately connects all of the learning nodes of the site ringing the creek and large meadow along the 100 year floodplain extents. The pedestrian experience is drawn in the vertical plane, from creekbed to riparian edge to meadow to tree canopy above. Some attributes of this concept include the following:

- 2 PARKS - INNER AND OUTER ZONES
- ENGAGEMENT WITH SITE HYDROLOGY
- HEART OF THE SITE / HISTORIC HOMESTEAD
- BUFFERED PEDESTRIAN EXPERIENCE





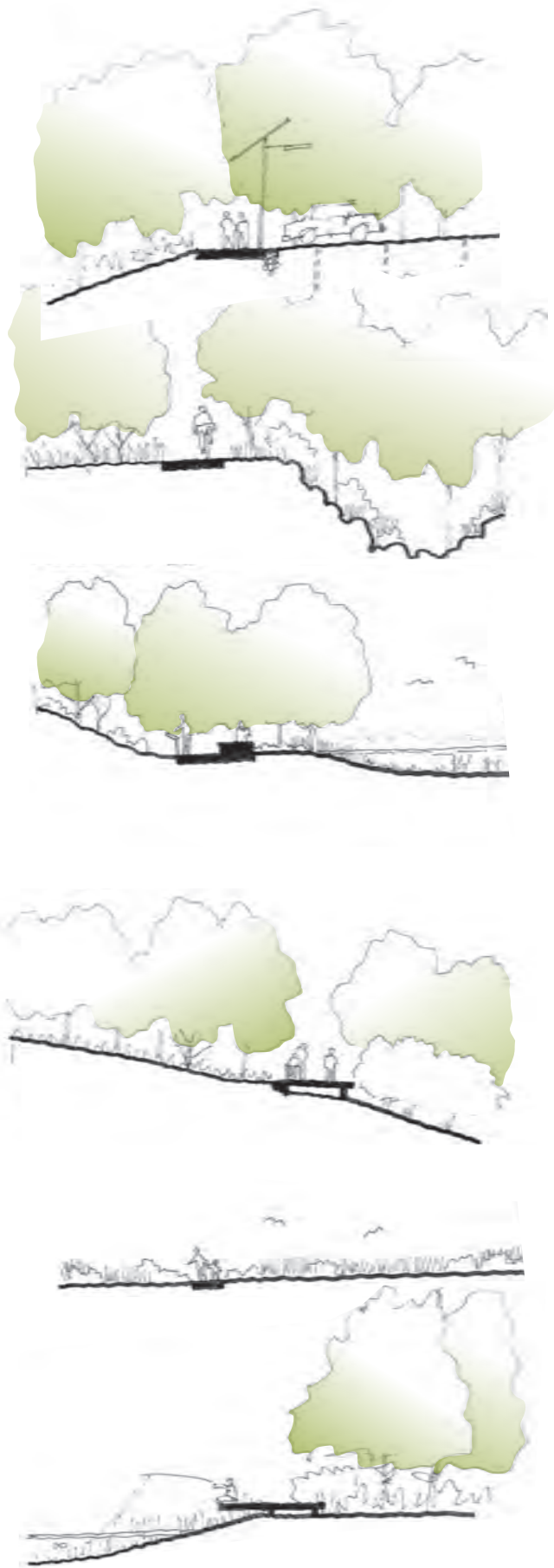
Neighborhood Park Experience



Mansfield Community Park + Nature Preserve : Master Plan



Nature Preserve Experience



SITE TRANSECT WALKS

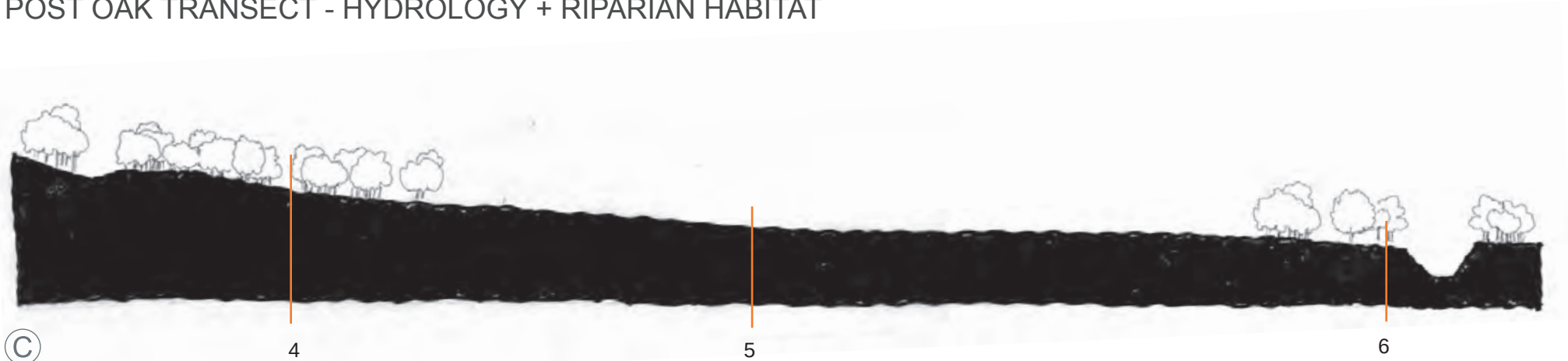
Site trails provide opportunities for exploration, immersion, and exercise. Transect walks in particular bring park users through the landscape to experience the variety of open spaces, forested areas, rocky slopes, and topography. Each transect allows interpretative opportunities that range from the rich cultural history to natural stories of hydrology and animal habitat.



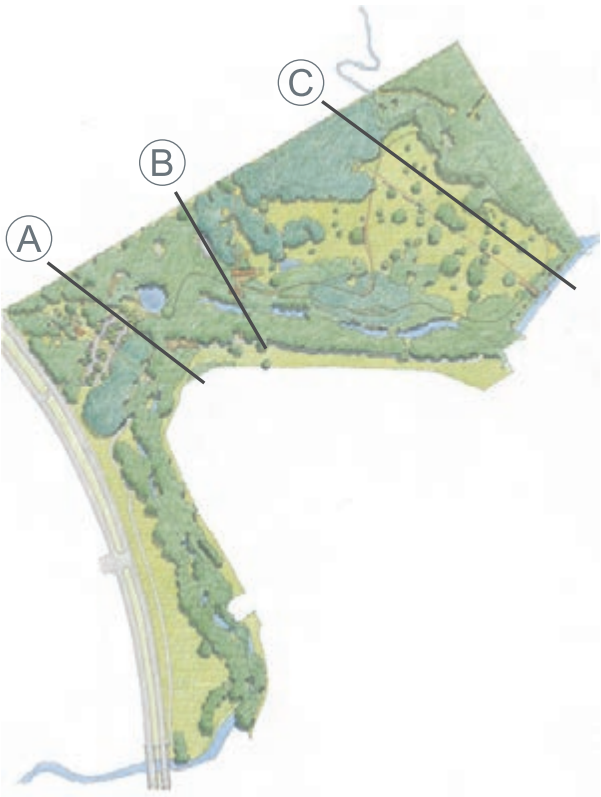
① PECAN TRANSECT - CULTURAL HISTORY



② POST OAK TRANSECT - HYDROLOGY + RIPARIAN HABITAT

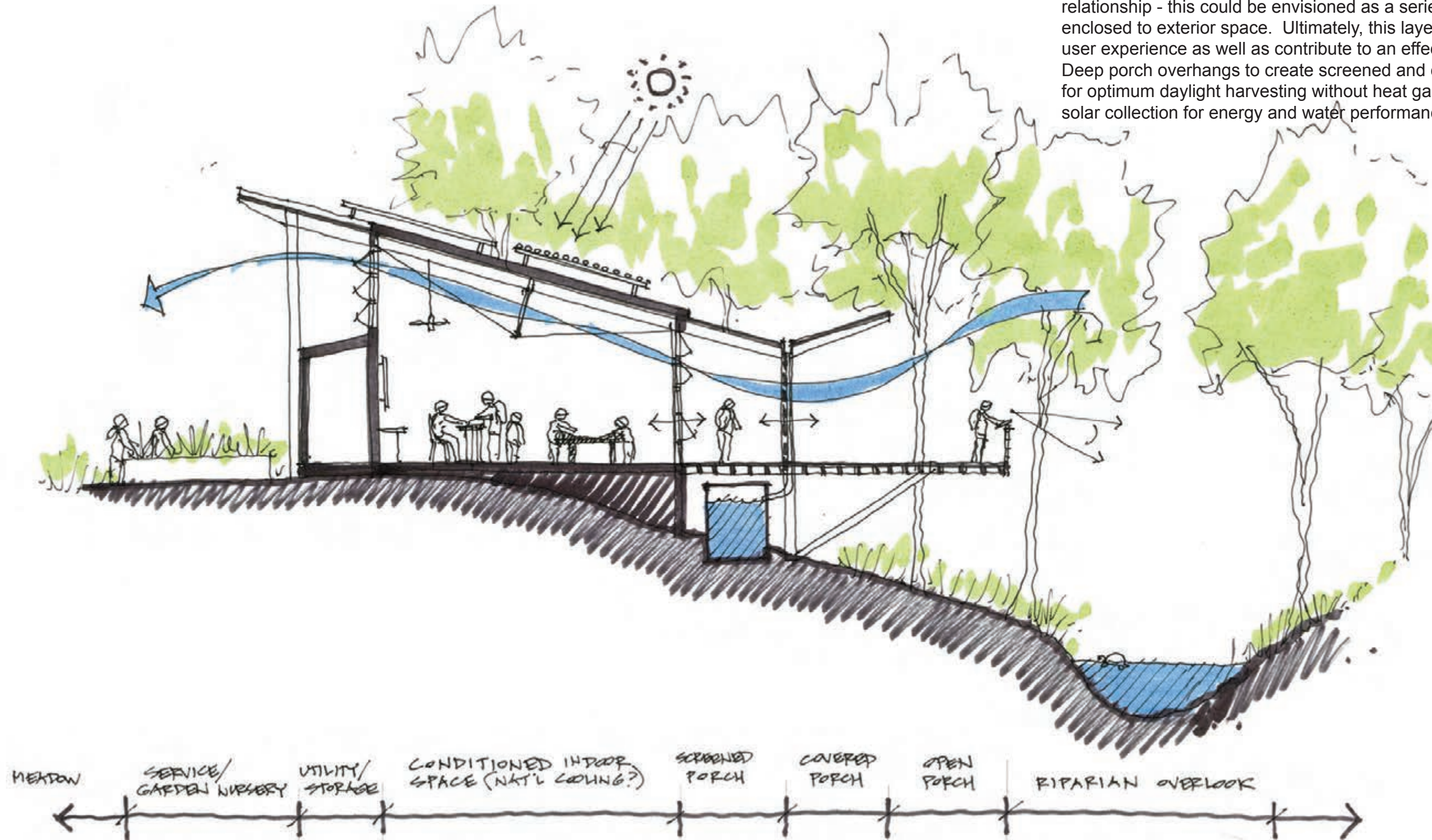


③ SCRUB TRANSECT - MEADOW HABITAT



LAYERED SPACES - CONCEPTUAL SECTION

The nature education center is intended to be a flexible series of program spaces that allows for both passive interpretation experiences as well as active teaching programs. During other times, these spaces may serve to accommodate special events and gatherings such as lectures, weddings and retreats. This “basecamp” will be a vital resource for the overall site experience. It is essential that the design of the building spaces considers a strong indoor and outdoor relationship - this could be envisioned as a series of layers that transition from enclosed to exterior space. Ultimately, this layering can contribute to a positive user experience as well as contribute to an effective environmental response. Deep porch overhangs to create screened and covered gathering will also allow for optimum daylight harvesting without heat gain as well as stormwater and solar collection for energy and water performance goals.



USER EXPERIENCES

Both the Neighborhood Park and Nature Preserve will provide a diverse array of options and activities to accommodate the diverse itineraries of varying user groups. MISD school groups, families, disabled users, and individuals seeking retreat will find a spectrum of experiences in this immersive landscape.



SCHOOL GROUPS



EATING



CONNECTING



TESTING



ESCAPING



FAMILIES



FINDING



GATHERING



WATCHING



TOUCHING



SENIORS



ARRIVING



ROAMING



EXPLORING



DISCOVERING



DISABLED USERS



LINKING



MAPPING



TEACHING



REMEMBERING + CREATING



PRELIMINARY MASTER PLAN
Preliminary Program & Budget Projections
August 8, 2011

No.	Item Description	Quantity	Unit	Subtotal
1. NEIGHBORHOOD PARK				
A.	Main Entrance	1	LS	\$85,000.00
B.	Parking (Approx. 60-70 Spaces)	1	LS	\$320,000.00
C.	Restroom Building	1	LS	\$250,000.00
D.	Pecan Transect Pathway	1	LS	\$75,000.00
E.	Picnic Area	1	LS	\$125,000.00
F.	Pond Enhancements	1	LS	\$85,000.00
G.	Cultivation Classroom Area	1	LS	\$50,000.00
TOTAL				\$990,000.00
2. NATURE PRESERVE				
A.	Staff / Service Access Road	1	LS	\$300,000.00
B.	Staff / Event Parking (20-30 spaces)	1	LS	\$150,000.00
C.	Nature Education Center	1	LS	\$3,500,000.00
D.	Treehouse Lab	1	LS	\$1,500,000.00
E.	Post Oak Transect Pathway	1	LS	\$50,000.00
F.	Hydrology Classroom Area	1	LS	\$85,000.00
G.	Homestead Classroom Area	1	LS	\$100,000.00
H.	Nature Play Zone	1	LS	\$100,000.00
I.	Pond Enhancements	1	LS	\$50,000.00
J.	Forest Classroom Area (includes Braided Path/Natural Amphitheater)	1	LS	\$150,000.00
K.	Geology Classroom Area	1	LS	\$50,000.00
L.	Ecotone Classroom Area	1	LS	\$30,000.00
M.	Creek Trail / Floodplain Trail (1 mile)	1	LS	\$310,000.00
N.	Scrub Habitat Transect Pathway	1	LS	\$100,000.00
TOTAL				\$6,475,000.00
3. GREENBELT TRAIL				
A.	Multi-use Connector Trail (1/2 Mile)	1	LS	\$500,000.00
B.	Bridge / Observation Platform	1	LS	\$200,000.00
C.	Eastern Bridge	1	LS	\$120,000.00
TOTAL				\$820,000.00

A. SUMMARY OF CONSTRUCTION TOTALS:	
1. NEIGHBORHOOD PARK	\$990,000.00
2. NATURE PRESERVE	\$6,475,000.00
3. GREENBELT TRAIL	\$820,000.00
TOTAL	
BASE TOTAL	\$8,285,000.00
+ 15% CONTINGENCY	\$1,242,750.00
CONSTRUCTION TOTAL	\$9,527,750.00
B. OWNERS COSTS (Geotech, Testing, TDLR, etc.) (Approx. 1.5% of Construction)	
	\$143,000.00
C. A/E DESIGN SERVICES	
	\$900,000.00
GRAND TOTAL:	\$10,570,750

