



Midwin National Tallgrass Prairie

Iron Bridge Trailhead Improvements

Visitor Experiences at The Bison Project

Arsenal Worker Statue & Memorial

New Facilities at Iron Bridge Trailhead

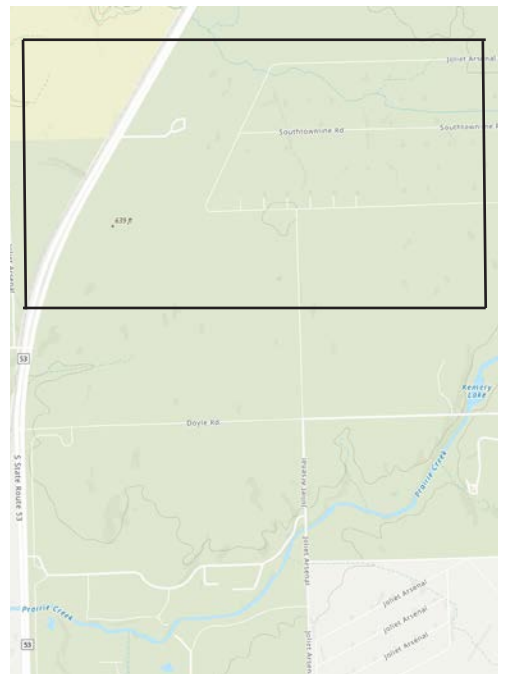
- Hiking, Photography, and Exercise
- Community Event Spaces
- Natural Playscape



Wilmington, Illinois

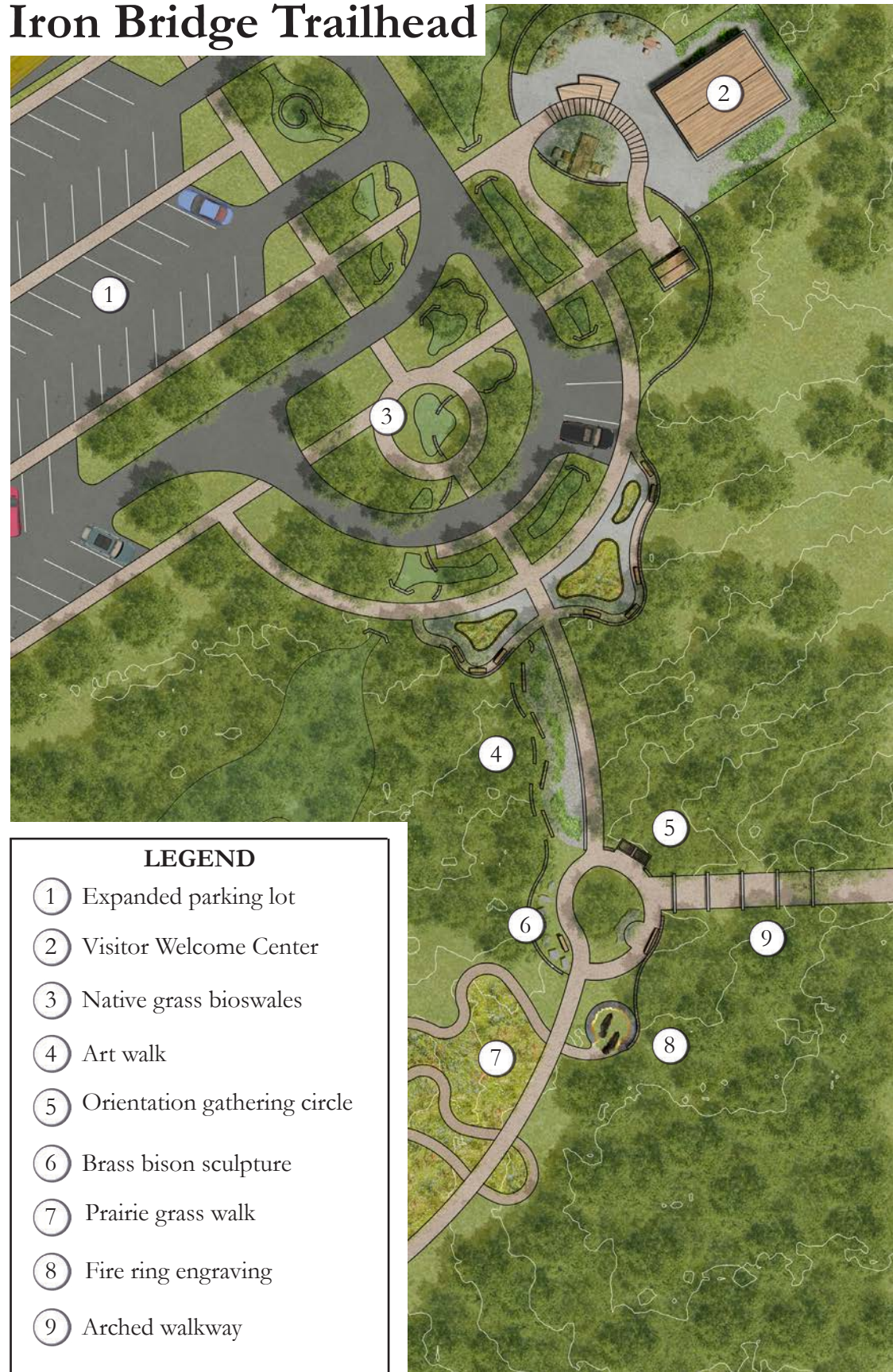


North Master Plan



- LEGEND**
- ① Iron Bridge Road Entry
 - ② Iron Bridge Parking
 - ③ Iron Bridge Trailhead
 - ④ Nature Play Space
 - ⑤ Rails to Trails Plaza
 - ⑥ Memorial Bunker
 - ⑦ Overlook Bunker
 - ⑧ Bunker Viewing Mounds
 - ⑨ Prairie Run Trailhead

Iron Bridge Trailhead



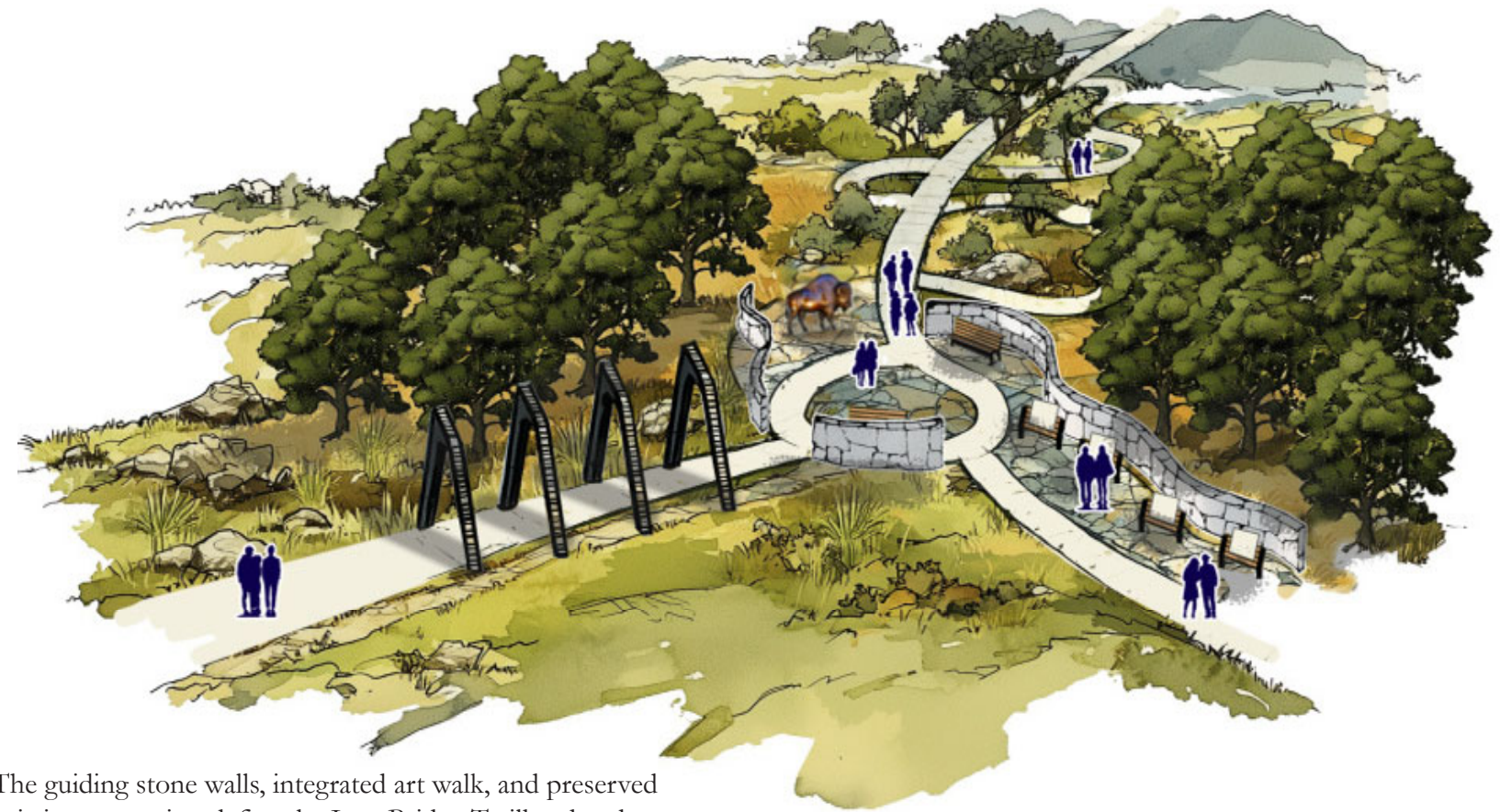
LEGEND

- ① Expanded parking lot
- ② Visitor Welcome Center
- ③ Native grass bioswales
- ④ Art walk
- ⑤ Orientation gathering circle
- ⑥ Brass bison sculpture
- ⑦ Prairie grass walk
- ⑧ Fire ring engraving
- ⑨ Arched walkway

The redesigned Iron Bridge Trailhead enhances circulation and wayfinding while establishing a stronger sense of arrival through expanded parking, a dedicated drop-off loop, and an improved visitor shelter. Stone walls, vertical wooden elements, and a curated art walk reference the region’s prairie and historic bunkers, creating a cohesive and expressive entry sequence.



Improved architectural visibility, warm wooden elements, and a clarified entry sequence create a more welcoming and legible visitor shelter entry.



The guiding stone walls, integrated art walk, and preserved existing vegetation define the Iron Bridge Trailhead and create a memorable gathering space.

Nature Play Space

North Master Plan



The nature-based play space introduces an immersive, prairie-inspired environment designed to support experiential learning and unstructured play. Two distinct zones, one for early childhood play and one for older children, offer age-appropriate activities that encourage exploration, motor development, and connection to the tallgrass prairie.

Play Features

The play environment is first organized into a young-child zone, featuring color-matching toys, interactive tree stumps, and sand play. The older-child zone features grass mounds, tree steppers, monkey bars, sculptural climbing feature, and play shelters that resemble on-site historic farmsteads.

Additional Elements

Additional elements include shaded seating for parents, shaded dining, and an outdoor classroom/large group gathering space for encouraging outdoor education in a space of play.

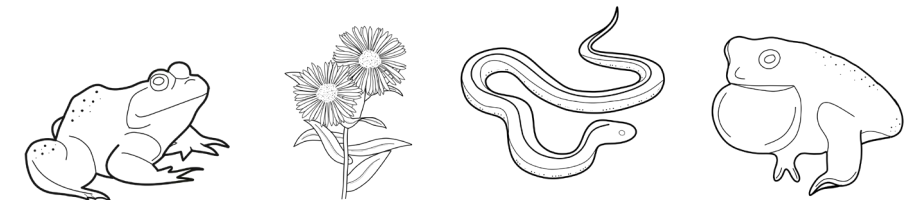


LEGEND

- ① Colored guiding walkway
- ② Young child play
- ③ Shaded seating area
- ④ Older child play
- ⑤ Shaded dining
- ⑥ Outdoor classroom

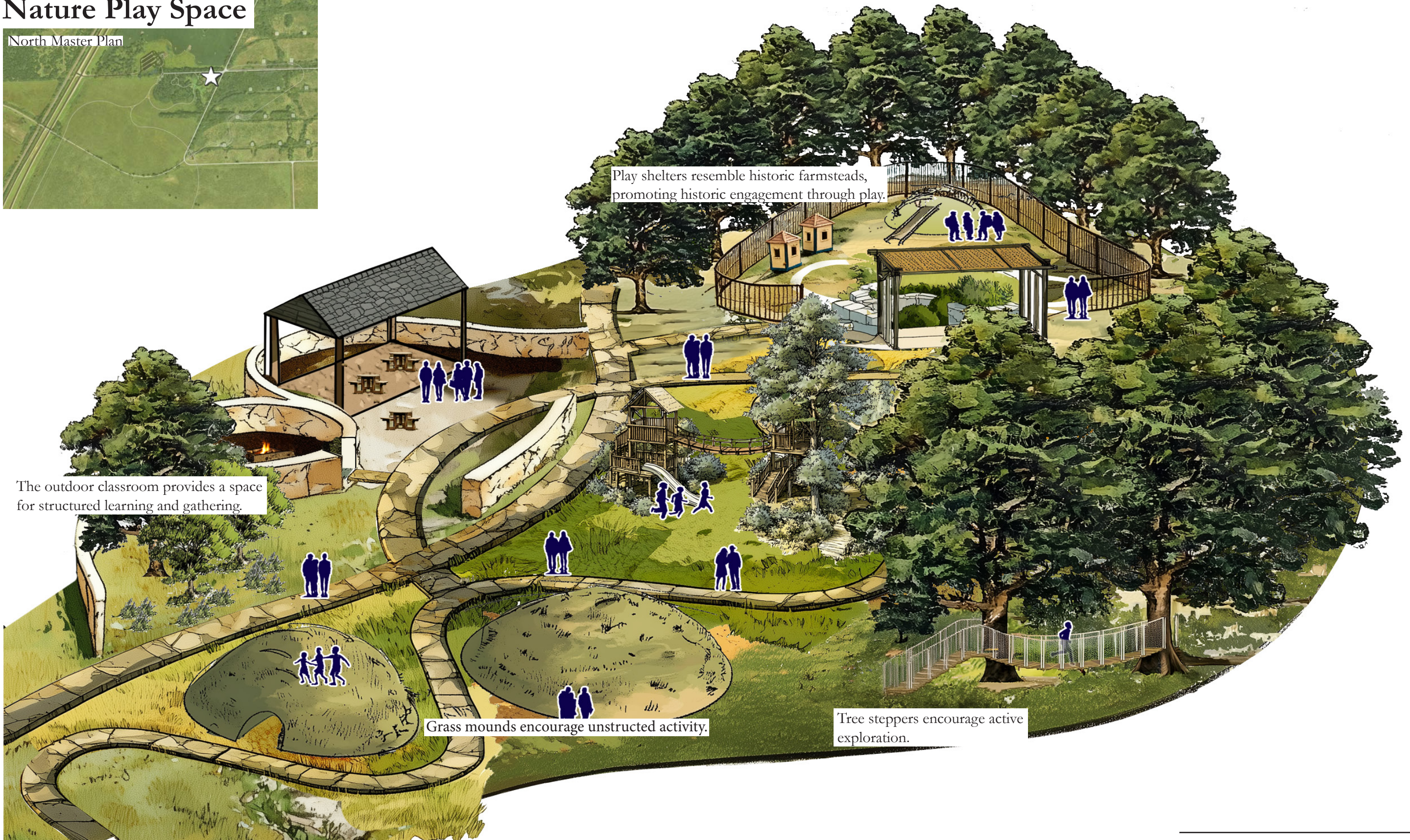
Interactive Scavenger Hunt

A year-round scavenger hunt has been embedded into the play equipment through engraved illustrations of native prairie plants, mammals, reptiles, and birds. Children will receive a rotating set of five carvings to locate during each visit, encouraging repeat visitation while deepening familiarity with the ecology and wildlife of Midwestern.



Nature Play Space

North Master Plan



Play shelters resemble historic farmsteads, promoting historic engagement through play.

The outdoor classroom provides a space for structured learning and gathering.

Grass mounds encourage unstructured activity.

Tree steppers encourage active exploration.

Bunkers and Plaza

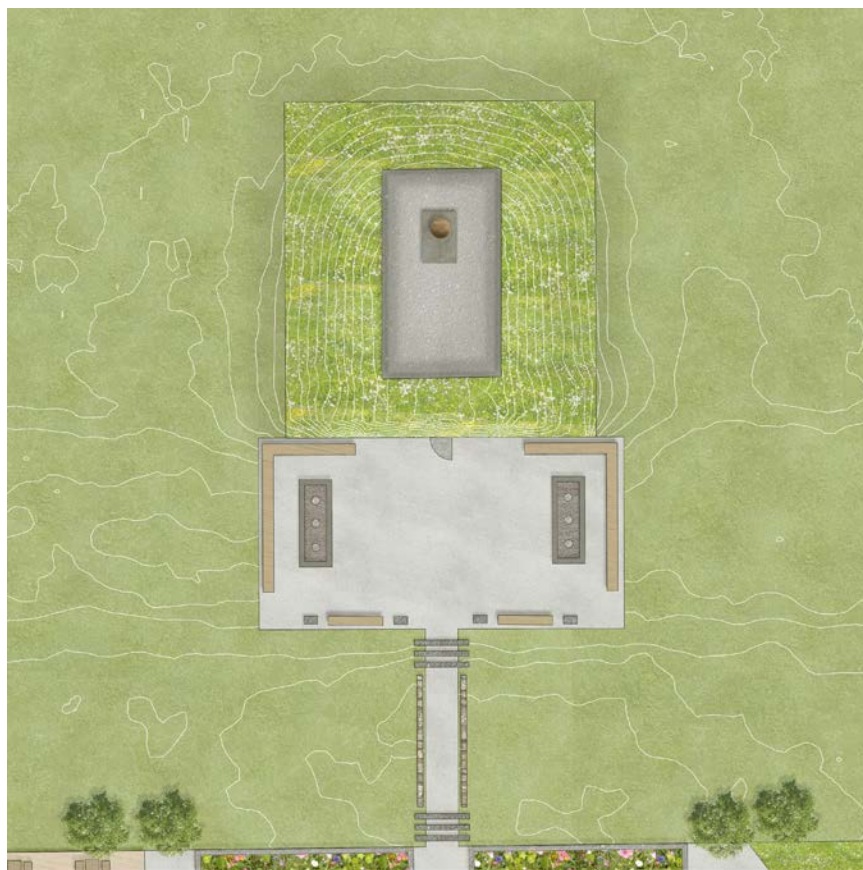
North Master Plan



An introduced 930 foot “Rails to Trails” plaza creates a continuous, on-foot connection between the repurposed Memorial Bunker and Overlook Bunker, transforming the former ammunition plant corridor into an accessible, exciting destination. The plaza extends and integrates a previous student’s design work by framing each bunker with new gathering areas, circulation opportunities, and interpretive elements that celebrate the site’s history as Joliet Army Ammunition Plant.



Memorial Bunker



Memorial Bunker (original vision)



Overlook Bunker

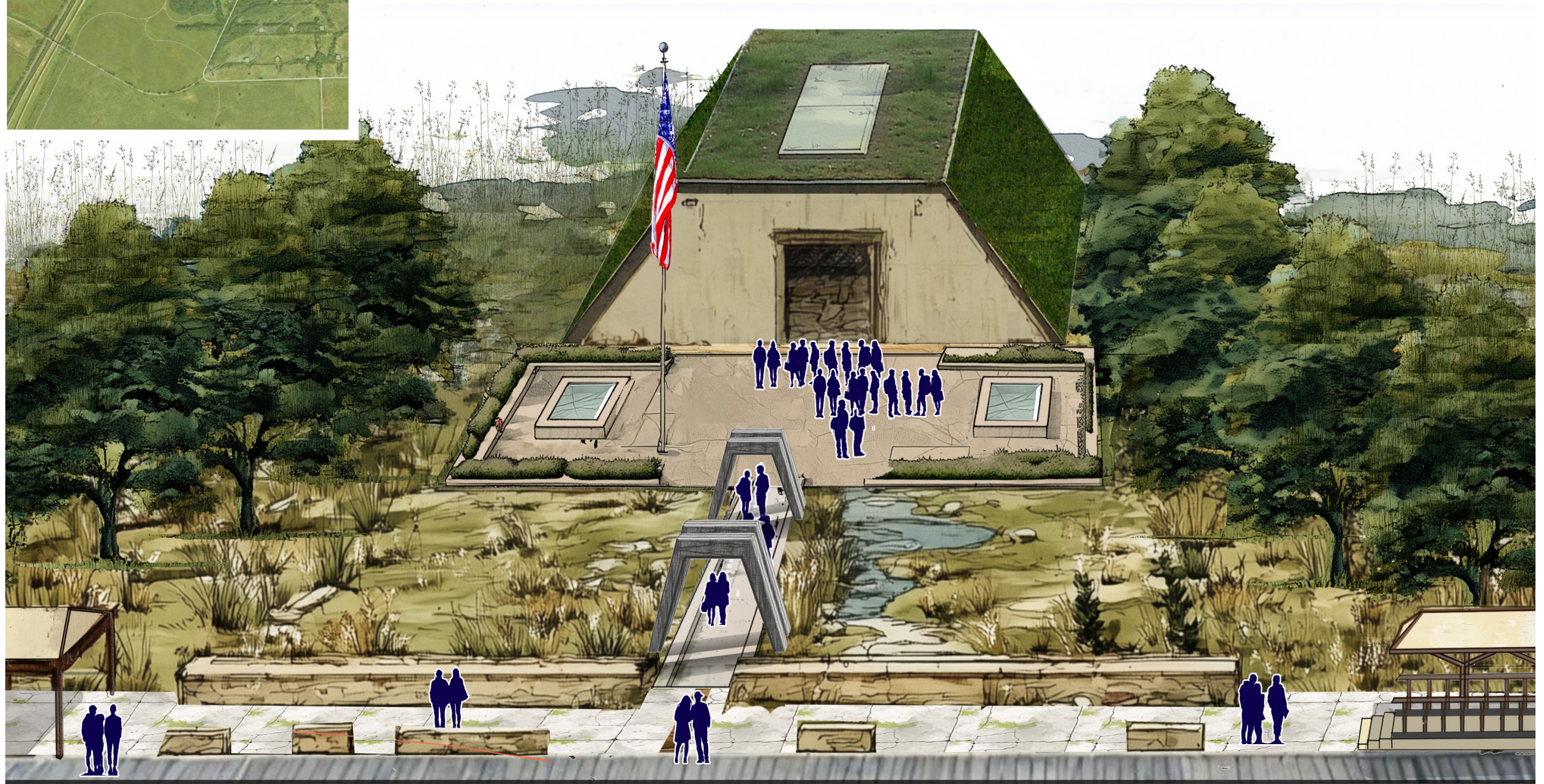


Memorial Bunker

North Master Plan

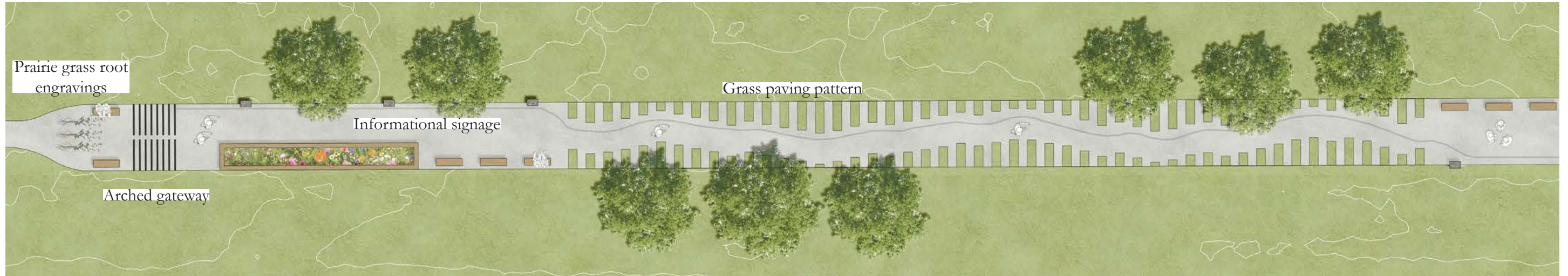


The Memorial Bunker honors the service of war heroes, while the surrounding plaza recognizes the “unsung heroes”, the workers of the Joliet Army Ammunition Plant. Together, the bunker and its forecourt create a unified commemorative landscape that reflects the sacrifice and labor of the ammunition plant. This gathering space offers areas for reflection, education, and quiet observation.



Rails to Trails Linear Plaza

The "Rails to Trails" linear plaza transforms an industrial corridor into a welcoming linear promenade. Designed for on-foot exploration, the plaza highlights the site ammunition plant history through interpretive signage, gathering spaces, and movement through the prairie landscape.



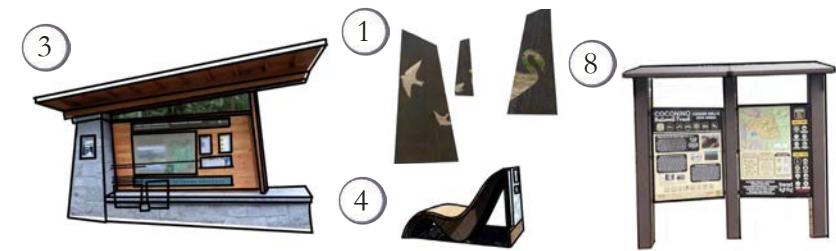
Bison Viewing Mounds and Prairie Run Trailhead



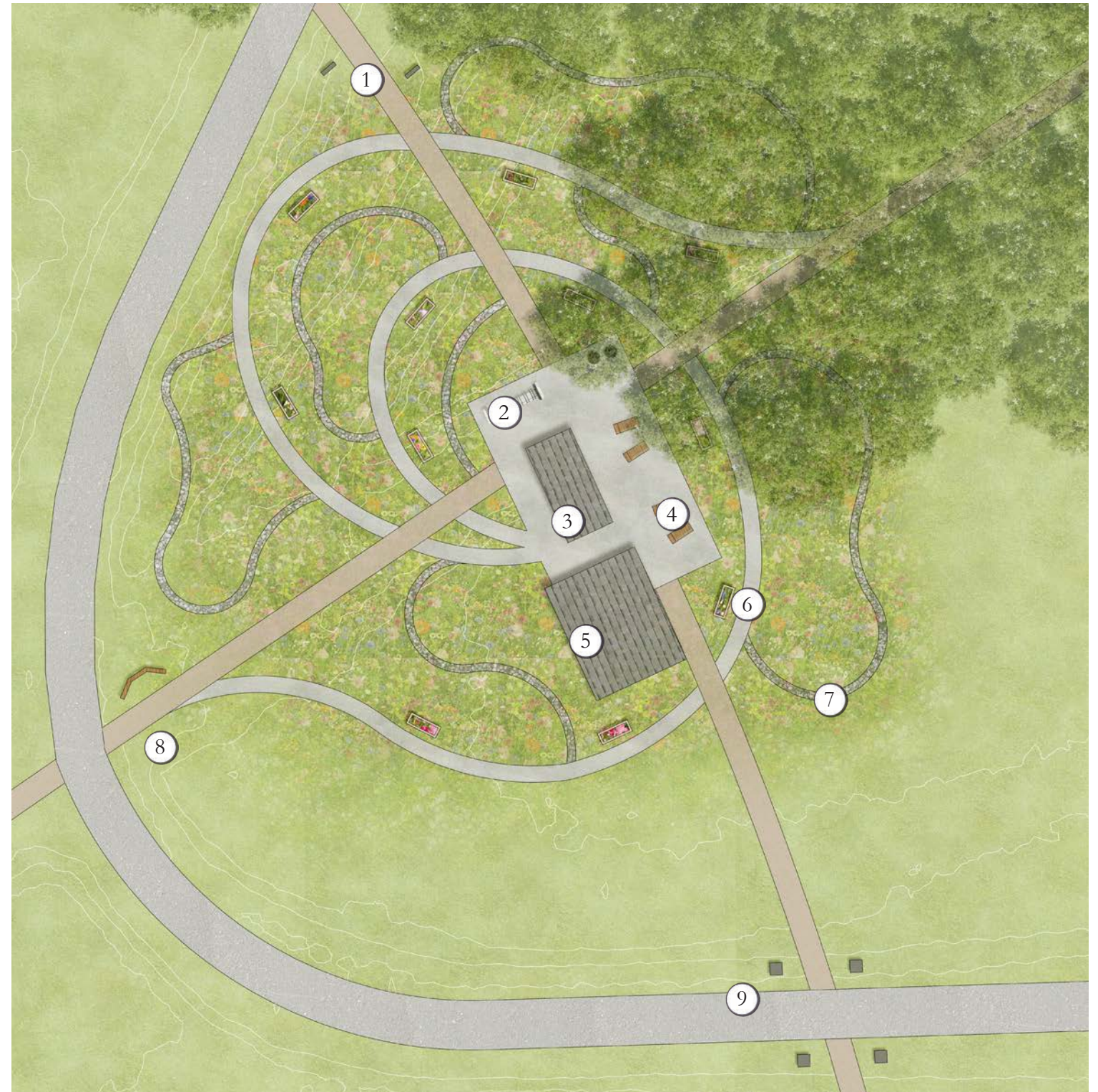
A trail passes over two existing bunkers, creating a gradual elevation shift that improves sightlines toward the bison herd to provide an engaging walking experience. The design leverages existing landforms to encourage movement, curiosity, and a deeper connection to the prairie.



- LEGEND**
- ① Entry sculptures
 - ② Bike rack
 - ③ Shaded signage hub
 - ④ Reclined seating with signage
 - ⑤ Family restroom
 - ⑥ Raised planting beds
 - ⑦ Gravel paths
 - ⑧ Informational signage
 - ⑨ Bison pillars



The Prairie Run Trailhead unifies the northern and southern site elements through a thoughtfully programmed arrival space featuring entry sculptures, bike parking, shaded signage, raised planting beds, gravel paths, and directional signage. Vertical markers and pillars encourage wayfinding and visually lead visitors towards the bison viewing sequence.



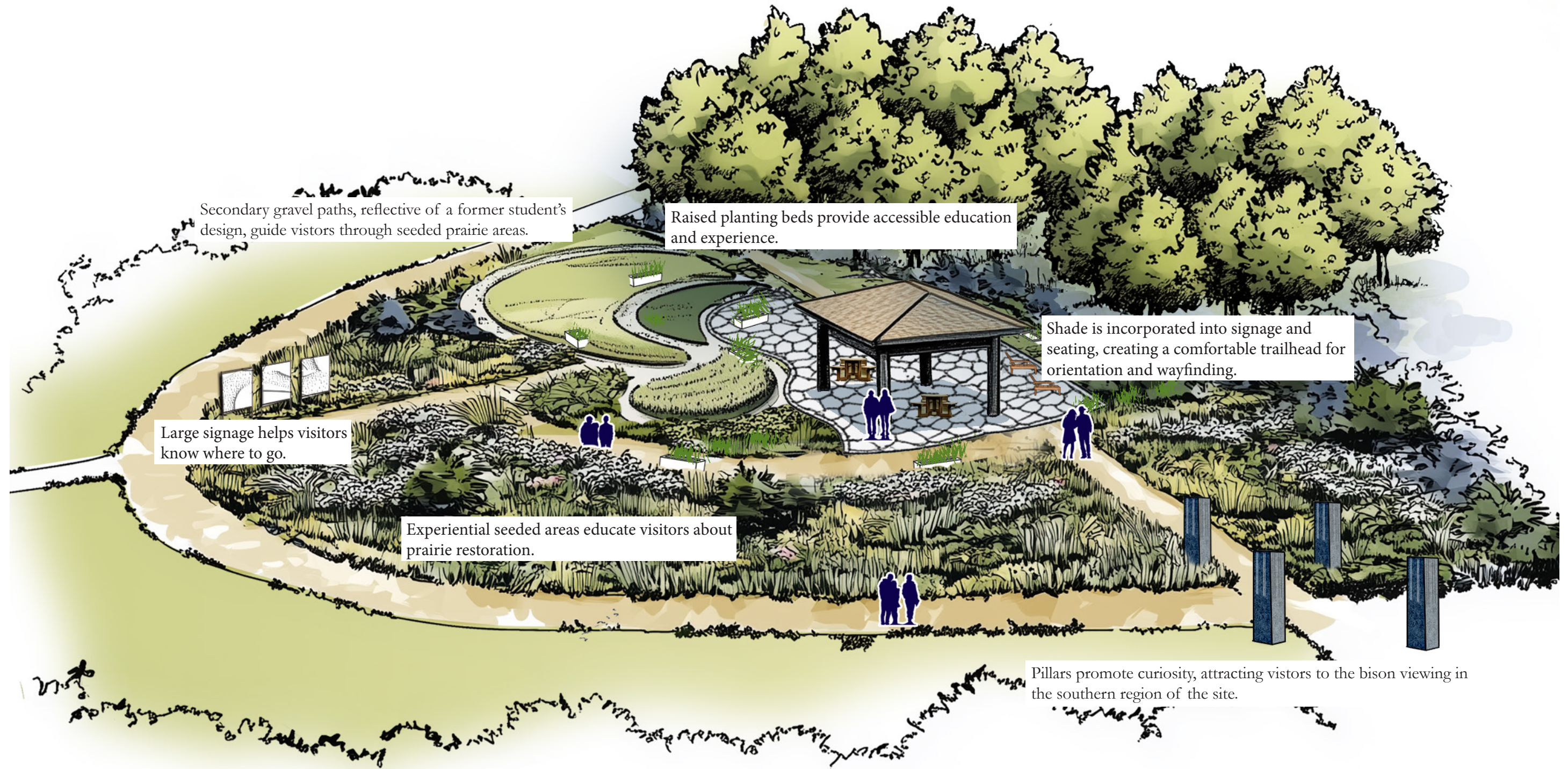
The Bison Viewing Mounds and Prairie Run Trailhead are two key visitor infrastructure elements that strengthen the site's connectivity, visibility, and access.

Bison Viewing Mounds

The Bison Viewing Mounds offer visitors a gentle, elevated path with expanded sightlines across the prairie, creating an engaging place to observe the herd. Native plantings and open views provide an immersive, enjoyable experience that highlights the scale and beauty of Midewin's restored landscape.



Prairie Run Trailhead



South Master Plan



LEGEND	
①	Bison Trailhead Road Entry
②	Bison Trailhead Parking
③	Bison Trailhead
④	Bison Overlook 1
⑤	Bison Overlook 2
⑥	Photography Vista
⑦	Land Bridge
⑧	Bison Bridge

Bison Viewing Sequence

Major bison-viewing elements include the Bison Trailhead, expanded parking, two elevated overlooks, and a rentable photography vista. These elements create a cohesive visitor experience that prioritizes the respect for the bison herd, education enagement, and a sense of discovery through exploration. Strategic placement of high-point viewing areas and thoughtfully designed paths creates meaningful opportunities for visitors to observe and learn about the bison in their restored prairie habitat.



Bison Trailhead and Photography Vista

Concrete surfaces are intersected by sculpted grass mounds and frame by a stone retaining wall. A shade structure creates a purposeful vantage point for amateur and professional photographers, while providing protection for photography equipment.



A hoof-shaped layout, stone-stepping path, and an accessible walkway organize the Bison Trailhead into a symbolic and function gathering space. Education signage, hoof engravings, shaded seating and education areas, and a restroom function together to support visitor comfort and deepen understanding of the bison herd and habitat.

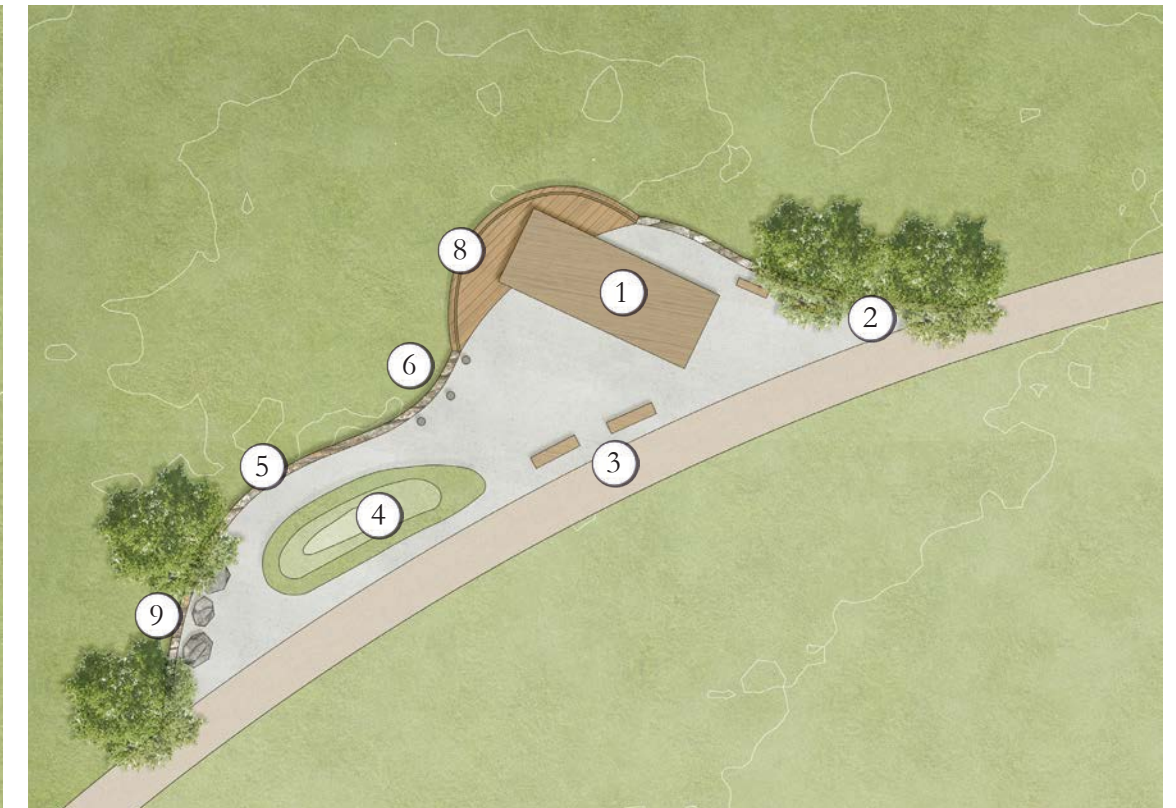
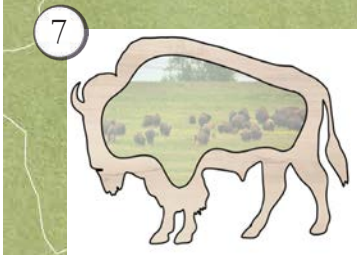


This section illustrates visitors observing bison from the photography vista. Visitors are kept at a safe distance, and the natural topography highlights enhanced visibility and minimal site disturbance.

LEGEND	
①	Grass Mounds
②	Shade Structure
③	Hoofprint Engravings
④	Shade Structure
⑤	Stone Wall
⑥	Seating
⑦	Stepping Stones
⑧	Family Restroom

Bison Overlooks

South Master Plan



This overlook features a wooden viewing deck and engraved stones, encouraging visitors to treat the bison and prairie with respect.

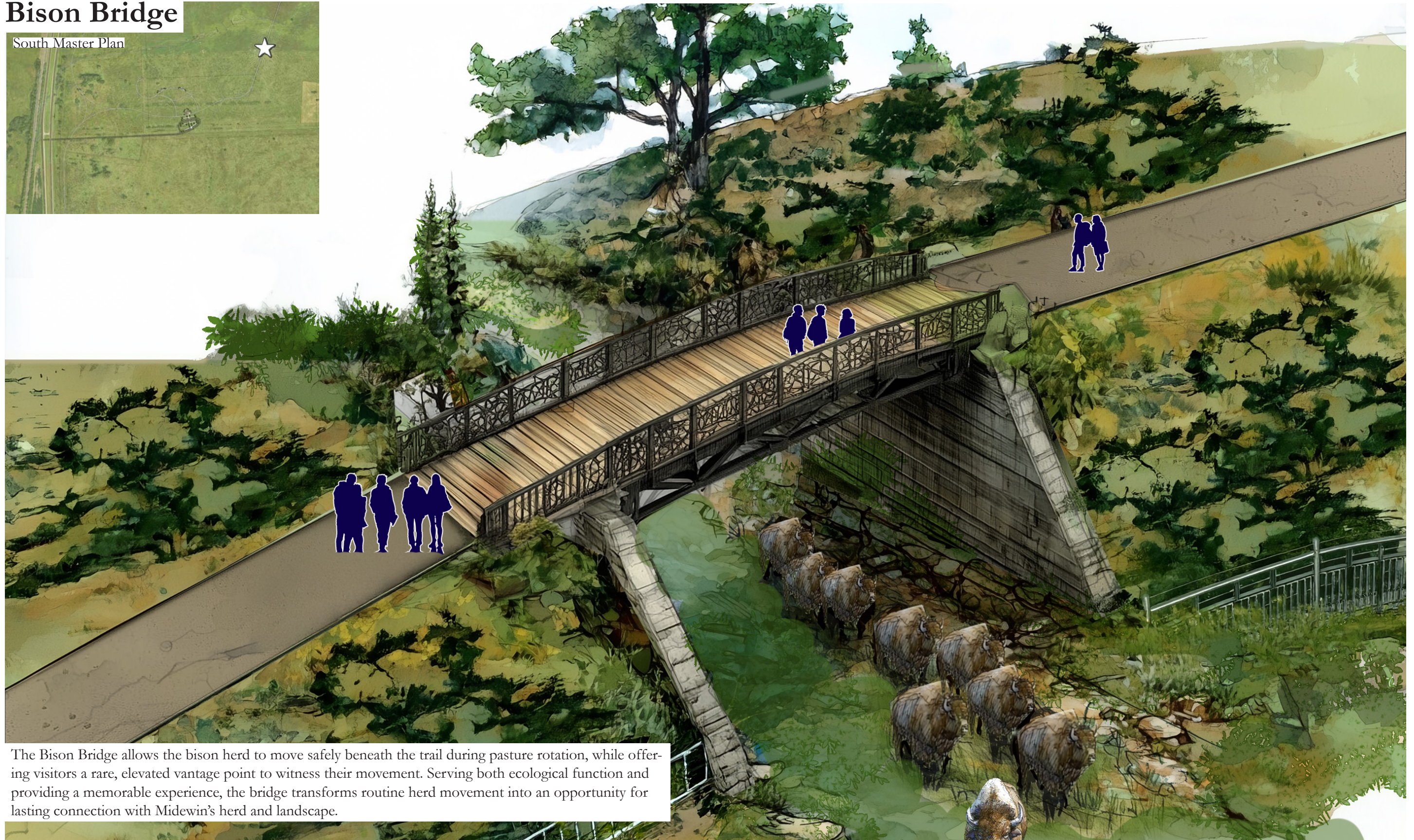
LEGEND	
① Shade Structure	⑥ Binoculars
② Signage	⑦ Bison Cutout
③ Seating	⑧ Viewing Deck
④ Grass Mounds	⑨ Engraved Stones
⑤ Stone Wall	

Organic concrete forms, sculpted grass mounds, and curving stone walls combine organic shapes with the rigid shade structures, seating, and signage. Both overlooks rest along the pedestrian trail, to provide convenient, intuitive stopping points. A bison-shaped cutout frames likely views of the bison herd.



Bison Bridge

South Master Plan



The Bison Bridge allows the bison herd to move safely beneath the trail during pasture rotation, while offering visitors a rare, elevated vantage point to witness their movement. Serving both ecological function and providing a memorable experience, the bridge transforms routine herd movement into an opportunity for lasting connection with Midewin's herd and landscape.

Design Process



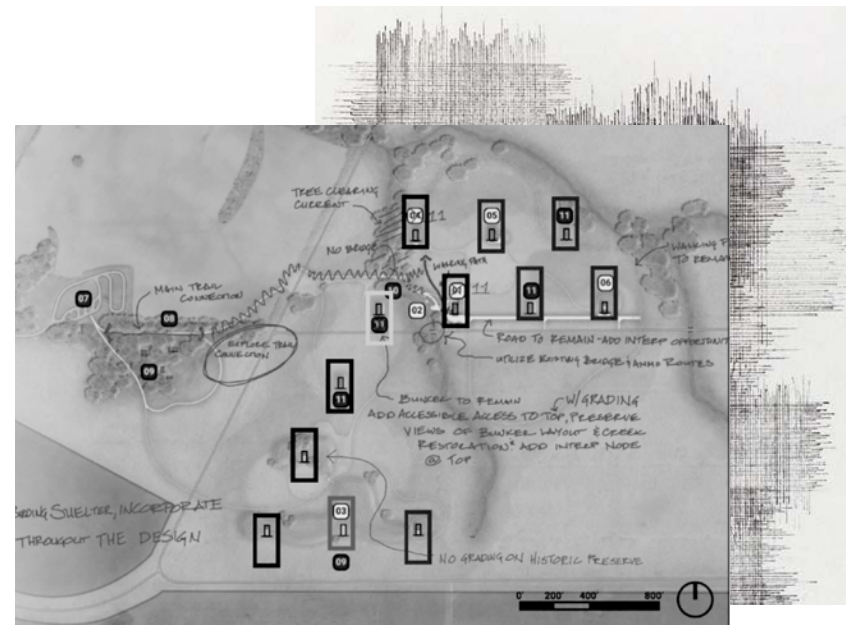
Designed and rendered by Nicole Rabfaladt.



Designed and rendered by Ben Henschen.

Phase I: Design Creativity

Three senior capstone students initiated the project by I Midewin through three thematic lenses: visitor experience, bison viewing, and bunker programming. Their independent proposals established the conceptual foundation for improving access, interpreting history, and elevating the ecological and cultural identity of the landscape.

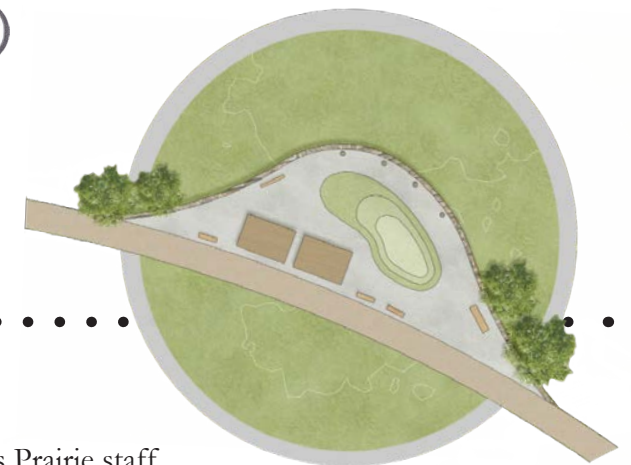


Phase III: Design Detail Development

Two undergraduate design assistants advanced the master plan by developing detailed design proposals that could guide future implementation. Their work refined trailheads, bison-viewing experiences, plaza spaces, play areas, and interpretive elements, bringing technical clarity and site-specific character to each component.



2025



Designed and rendered by Katelyn Rockey.

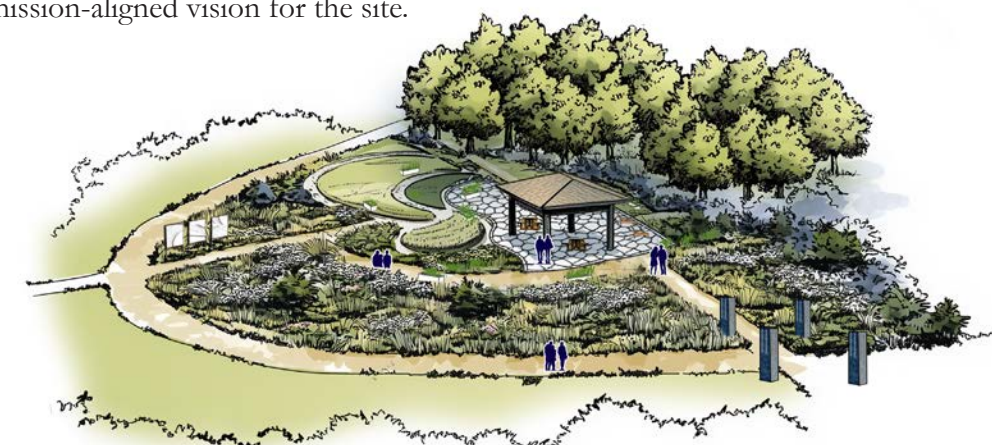
Phase II: Feedback, Refinement, and Integration

Following review and input from Midewin National Tallgrass Prairie staff, a new senior undertook the task of synthesizing the capstone work into a unified master plan. This phase focused on aligning program elements, strengthening circulation networks, and ensuring that all components supported a cohesive, realistic, and mission-aligned vision for the site.

2024



Designed and rendered by Alejandra Hughes.



Rendered by Dr. Aaron Thompson.
Designed by Katelyn Rockey and Isabella Magoffin.

2023



Designed and rendered by Nicole Rabfaladt.



Designed and rendered by Gabriela Nivar.

