CEDAR FALLS HIGH SCHOOL

Cedar Falls, Iowa

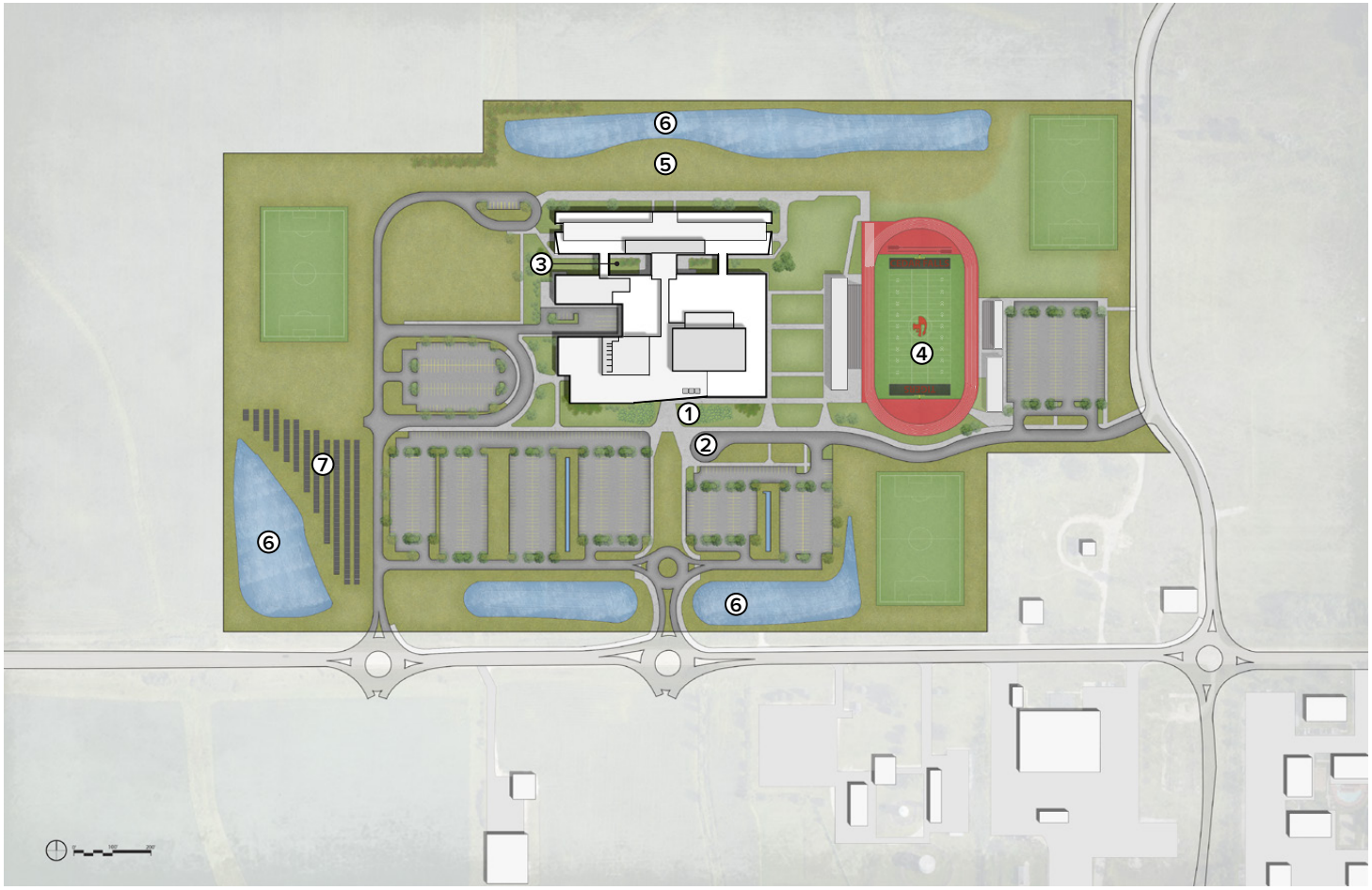
SITE STRATEGY

The site strategy for Cedar Falls High School emphasizes sustainability and community collaboration. Partnering with organizations like the Dry Run Creek Association and the Tall Grass Prairie Center, the district enhanced ecosystem health through native plantings that support pollinators and wildlife while minimizing maintenance.

Outdoor learning spaces were designed to connect students with nature, with daylight-filled learning studios and a central courtyard featuring indigenous vegetation. Biology and science labs on the first floor open to outdoor learning areas, fostering hands-on education.

37%
Restored Site to Native Ecosystems

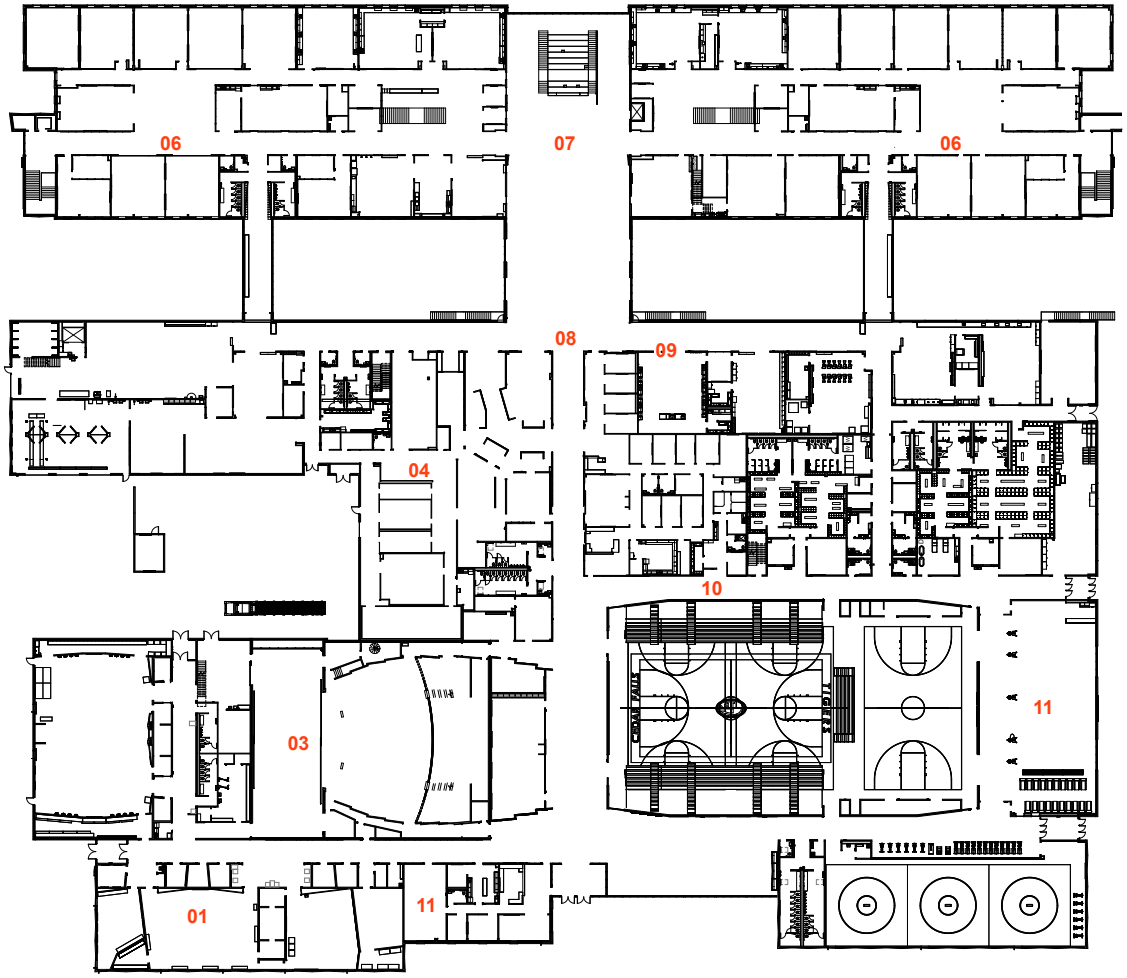
23.6
Acres of New Prairie Seeding



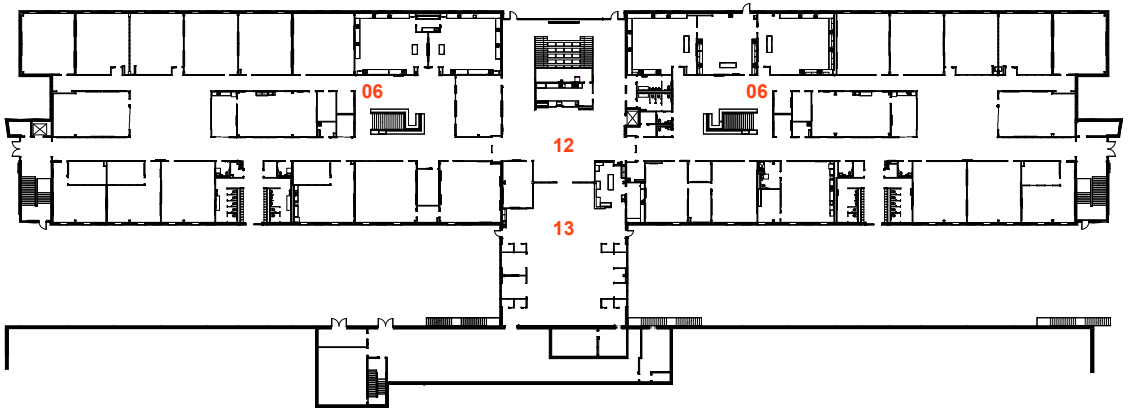
① Main Entrance
② Bus Loop
③ Outdoor Learning
④ Stadium & Concessions
⑤ Restored Prairie Habitat
⑥ Stormwater Management
⑦ Utility Company PV Array Partnership

Main Entrance - South Elevation

FLOOR PLANS



MAIN LEVEL



LOWER LEVEL

0' 20' 40' 60'

01 LEADERSHIP
02 PERFORMING ARTS
03 AUDITORIUM
04 KITCHEN
05 WOOD / METAL LABS
06 ACADEMIC
07 INNOVATION HUB
08 COMMONS
09 STUDENT SUCCESS
10 LEADERSHIP CENTER
11 ATHLETICS
12 TIGERS DEN
13 RESEARCH CENTER

Central Commons - Cafeteria

DESIGN FOR EQUITABLE COMMUNITIES

Community Engagement

The design process for Cedar Falls High School was rooted in shared vision and values. Prior to design of the new school “Insight Week” provided an opportunity for the school community to assemble and discuss the experience of learning provided by existing schools in the community. A wide variety of discovery activities were used with a diverse range of community groups to provide insights into patterns, trends, opinions and perspectives to shape the direction of the new high school.

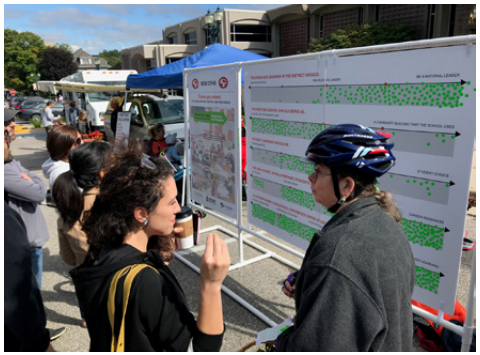
The design drivers resulting from Insight Week included

- **Connectedness** - the future of learning manifests through a greater degree of connectedness among the elements and factors that create conditions for learning.
- **Community + Co-location -** the future of learning is based in partnerships, shared resources, and co-location of learning opportunities that increase the dimensions of where learning occurs.
- **Diversity** - future of learning is based on a landscape of diverse and capable spaces that encourage new interactions, pathways for learning and an exploration of the possible.

300+
Community Members Engaged

14
Community Meetings

70+
Staff Members Engaged



2017 2018 2019 2020 2021 2022 2023 2024

- **Oct** Begin Planning
- **Jan** Community Kick-Off Meeting
- **Feb-May** Option Development
- **Sept** Community Group Meeting
- **Nov-May** Community Group
- **June** Bond Vote
- **Oct** 8 School Tours
- **Dec** All Staff Meeting
- **March** All Staff Meeting
- **June** DD Complete
- **Nov** Bid Docs Complete
- **Feb** Construction Start
- **Aug** School Opens

SD Complete

DESIGN FOR WELL-BEING

Inclusivity & Adaptability

Inclusivity and adaptability were integral throughout the design process. The design team collaborated with teachers and parents of diverse learners to shape decisions on signage, furniture, and spatial layouts. High-contrast, large-scale wayfinding signage was implemented to ease the experience for the visually impaired, while studies of light level and material reflectivity ensured even lighting and reduced glare. Classroom lights are tunable, allowing adjustment based on individual needs.

Furniture selections were chosen to promote inclusivity. In shared spaces like the central commons' cafeteria, tables were chosen to avoid traditional bench seating, instead offering flexible options that accommodate wheelchairs at any location. A hierarchy of seating from open chairs to private booths provides options to support varying sensory needs.

Quiet Break-out Student & Staff Workspace

Classroom with Resource Room for Quiet Workspace

Central Commons - Cafeteria

North Elevation - Looking Into “Pitch” Stairs

DESIGN FOR ENERGY

Sustainable Strategies

87
Code Baseline EUI

44
Predicted EUI

9
Post Solar Panel Installation EUI

Energy

1. Solar Shading & Light Shelf
2. Chilled Beam System
3. North Light Clerestory

Location & Site

4. Native Plantings
5. Light Materials

Materials

Durability

- A Concrete
- B Hot-rolled Steel Panels
- C Precast Concrete Exterior Walls

Energy

- D Brick Veneer - Selected for lower embodied energy over aluminum panels

Health & Wellbeing

- E Views outdoors from all classrooms
- F Biophilic Wood Paneling
- G Acoustic Comfort Panels

Co-Learning Studios

"Pitch" Stairs

Commons

Connector

Tech Labs - Metals & Woods

DESIGN FOR CHANGE

Flexibility & Adaptability

Adaptability and resilience are integral to the design of Cedar Falls High School, resulting in a flexible environment capable of evolving with future needs. The school's size and layout were strategically planned to accommodate community growth, with provisions for expanding both the main building and sports fields.

Flexible learning areas, such as co-learning studios and modular classrooms, were designed to support diverse educational practices and learning styles. Operable partitions in several areas allow classrooms to seamlessly connect to public spaces or adjust to varying needs throughout the day.

DESIGN FOR RESOURCES

Durability & Responsibility

Material choices were guided by a commitment to environmental responsibility, occupant health, and durability. The project team evaluated factors including embodied carbon, life-cycle impact, indoor air quality, and sourcing of materials to achieve a balance between high performance and minimized environmental impact.

Longevity and durability were important to the exterior material selection of a school that aims to serve the community for 70-100 years. Exterior materials include brick veneer, insulated pre-cast concrete walls, wood decking, and fiber cement. Tally was utilized as an embodied carbon evaluation tool which led to the selection of a brick veneer over alternative options such as aluminum metal panels, due to its lower embodied carbon, greater longevity and ability to be locally sourced and installed. Pre-cast walls were utilized as a durable option that has minimal maintenance requirements and could be locally sourced.

Interior finish selections were made with dual-purpose use in mind. Wall finishes selected include weathered steel panels and felt panels, serve as wall protection while also providing a magnetic or tackable surface for display of student and educational materials. The gauge of weathered steel panels was selected after an embodied carbon evaluation to minimize the environmental impact.

East Elevation