

# CEDAR FALLS HIGH SCHOOL

Cedar Falls Community School District | Cedar Falls, IA





# MEETING GROWTH WITH A VISION: The New Cedar Falls High School

## FUTURE READY LEARNING BEGINS NOW

The Cedar Falls Community School District responded to rapid societal and educational change with a new, forward-thinking vision. Following a comprehensive study, the District recognized the urgent need for a new high school—one that not only addressed community growth and the aging infrastructure of the old building, but also presented an opportunity to re-imagine how education could be delivered in an evolving world.

## GUIDING THE VISION

At the heart of the project was a commitment to creating flexible, future- and career-ready learning environments rooted in sustainability, equity, and innovation. The District and Design Team created a new high school with the whole learner in mind, prioritizing adaptable spaces that supported individualized education while fostering strong community connections and collaboration.

The new Cedar Falls High School was grounded in the belief that learning environments should reflect the values of respect, diversity, and belonging. By embracing thoughtful, sustainable design and modern educational practices, Cedar Falls High School ensured it was prepared for what lay ahead—taking a meaningful step forward in ‘Shaping the Future.’

## THE COMMUNITY: CONNECTED, GROWING, THRIVING

The community of Cedar Falls, Iowa is a vibrant and growing city located in the heart of the Midwest. Known for its strong sense of civic pride, Cedar Falls boasts a diverse population of approximately 40,000 residents who enjoy a blend of small-town charm and progressive amenities. The city is home to the University of Northern Iowa, which contributes to dynamic cultural and educational environments. The community of Cedar Falls is recognized for its commitment to sustainability, innovation, public services, and a thriving local economy supported by both longstanding businesses and emerging technology sectors. The community values education, inclusivity, and collaboration—making it an ideal setting for a forward-thinking school design that reflected the aspirations and needs of its residents.



CTE Program: Woods Lab

### SCOPE OF PROJECT

### OWNER

Cedar Falls Community  
School District

### SITE AREA

69.5 Acres

### BUILDING AREA

366,615 GSF

### GRADES LEVELS

9 - 12

### STUDENT CAPACITY

1,400

### COMPLETION DATE

August 2024

### CONSTRUCTION COST

\$86,431,681.71



## FOUNDATION BY THE FIGURES

Cedar Falls High School is a state-of-the-art facility designed to foster student independence through its college campus-like atmosphere. The school cultivates a dynamic learning environment where students have the freedom to choose their gathering and study spaces—encouraging collaboration, creativity, and a sense of ownership over their education. Its open and adaptable design promotes meaningful connections between students, educators, and the broader community, creating a space where learners thrive academically and feel empowered to reach their full potential. The building features integrated learning communities that support personalized and flexible instruction, net-zero-ready infrastructure that demonstrates a strong commitment to sustainability, and universal design principles that ensure accessibility and inclusion for all. Together, these elements set a new benchmark for what innovative, sustainable, and resilient high school environments can look like across the country.

**1,222**      **PRECAST PANELS**

**3,000**      **GPM CAPACITY OF 3 GEOTHERMAL WELLS**

**4.00**      **ACRES IDENTIFIED FOR GROUND MOUNTED  
SOLAR ENERGY PRODUCTION**

**300,000**      **TRUCK LOADS OF DIRT REDISTRIBUTED ON  
THE SITE**



*Centralized Commons: Used for lunch, Power Hour, and a resource for the community*



# GROWING COMMUNITY MEANS PLANNING FOR CHANGE

## LAYING THE GROUNDWORK: INSIGHT WEEK

Insight Week provided an opportunity for the school and community to assemble and discuss the experience of learning that the current school offered. This process is focused deeply on community, staff, and student engagement. Insight week established the wants and needs of a future condition of learning. A wide variety of discovery activities were used with diverse groups that provided insights into the patterns, trends, opinions, perspectives and biases that would shape the direction of a new school.

Prior to Insight week the Cedar Falls Community School District engaged in a study to better understand the impact of community growth, integrated technology, existing infrastructure, and quickly evolving academic delivery models. These shifting changes are reshaping teaching and learning within every school district. Cedar Falls Community School District knew change was required to elevate academic success for it's students.

## DAY 1

### IN PERSON OBSERVATIONS

Full day of identifying the problems that currently occurred at the existing high school. Utilizing the time to understand their current flow and process

- Administrative kick-off meeting
- Tour of the existing high school
- Observations of classrooms: Science, Humanities, & Power Hour
- Observation during passing periods / lunch
- Observation of school close

## DAY 2

### DESIGN CHARRETTES

Pulling in a selected groups to understand where the problems lie, where we can think bigger, understanding how education wants to be delivered.

- Gathering 15-20 teachers for 4 hours
- Gathering 20-25 students for 3 hours

## DAY 3

### DESIGN CHARRETTES, OBSERVATIONS & INTERVIEWS

Met with groups to evaluate their spaces to fully understand their needs, how they function today and where they want to be.

- Administration design charrettes
- 5 minute classroom observations & school walk
- Library interview and discussion
- Athletics interview and discussion

## DAY 3

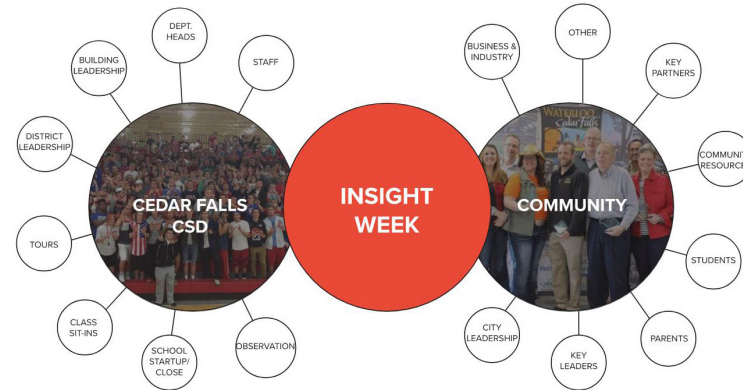
### INTERVIEWS

Met with groups to understand their perspective on high school education and the vision

- Leadership Team (Department Chairs, etc.)
- Parents
- University of Northern Iowa (UNI)
- Community Groups
- Support Staff



*“Insight Week painted a picture of the new school, it’s position in the **community**, and the future intent and direction of the school as a **learning institution**.”*



**70+**  
STAFF MEMBERS ENGAGED

**100+**  
STUDENTS ENGAGED

**14**  
DEDICATED COMMUNITY MEETINGS



Staff engagement meeting



Student Design Charrette on day 2



Community engagement at the local farmer's market



# LEARNING TOGETHER, SOLVING TOGETHER

## UNDERSTANDING THEY WHY

Creating a meaningful and functional environment starts with listening to those who use them every day. To design a school that truly support learning, collaboration, and well-being, it was essential to engage with all members of the school community: staff, administration, and students alike. Exploring the “why” behind each space helped align the planning with the core values and goals of the school, ensuring that any changes reflected our shared purpose. Creating dedicated groups and implementing “User Group Meetings” allowed the Design Team to receive important feedback that would shape programs and build the future of learning.

However, in the peak of the design development phase, the COVID-19 pandemic presented unique challenges to the process. With restrictions to in-person gatherings, much of the engagement had to shift to virtual meetings, which in the end allowed the Design Team to reach more people within the school district and receive more feedback to the design of the high school. Despite the limitations that came from remote collaboration, the pandemic underscored the importance of adaptability and resilience in design. This process empowered the community, prioritized transparency, and ensured that every voice was part of shaping a thoughtful and intentional path forward.

## KEY PLAYERS FORMED



### STEERING COMMITTEE

Key, influential individuals within the district who help build and shape the big picture.



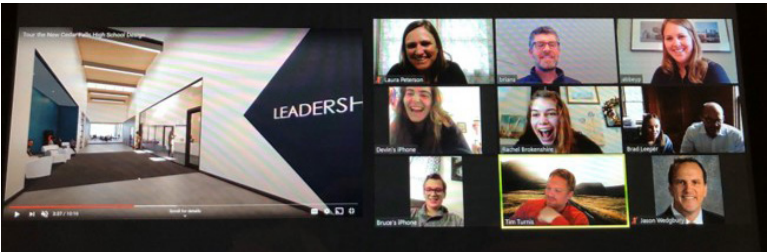
### EDUCATIONAL LEADERSHIP TEAM (ELT)

Direct users of the building: staff, teachers, principals. Formed early in programming to create the new high school.



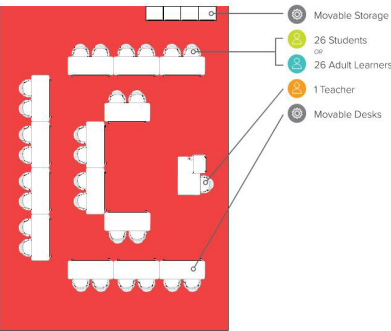
### STUDENT INTEGRATION TEAM

Current high school students that helped provide feedback during planning and design



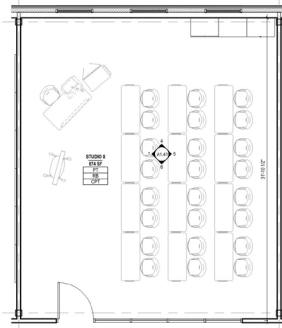
A snapshot of a virtual meeting with students that was held to gather feedback on the design and programmatic relationships of the new high school. Student engagement began early in the schematic design phase and continued through the construction of the high school.

## UNDERSTAND IT



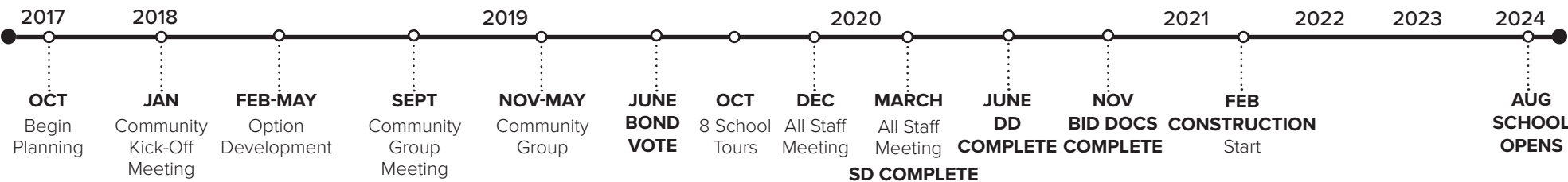
Data sheets were used to collect information from specific groups that would directly affect their program.

## TEST IT



After collecting the data, the Design Team had tested these needs to create the spatial layouts.

## IMPLEMENT IT





# EVERY STUDENT, EVERY DAY

CEDAR FALLS COMMUNITY SCHOOL DISTRICT | VISION STATEMENT



*Centralized Media Center, individual study rooms, meeting rooms & open collaboration*

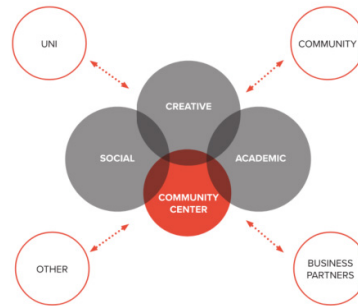




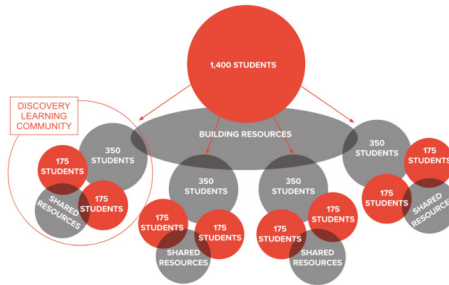
## ELEVATING THE EDUCATION STANDARDS

Cedar Falls High School reshaped the future of modern education by placing the student experience first. The building's adaptability and focus on community engagement drove its innovative approach. Unlike traditional models, this new vision integrated flexible learning spaces, natural lighting, and an emphasis on sustainable materials to foster a more inclusive, collaborative, and dynamic environment. Classrooms are no longer static boxes but now multipurpose zones that supports both independent study and group interaction, mirroring real-world workspaces. The architecture of the school supports interdisciplinary learning, wellness, and accessibility through open commons, technology integration, and outdoor classrooms. Community input helped shape a design that reflected local values while addressing future educational needs. As a result, the school serves as a hub of innovation, preparing students for real-world success beyond academics.

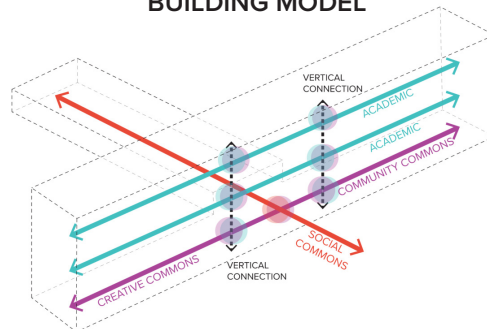
### SCHOOL AS A COMMUNITY ASSET



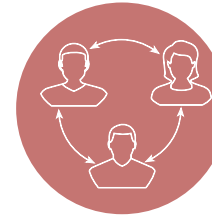
### LEARNING COMMUNITY MODEL



### BUILDING MODEL



### CONNECTION



The future of learning manifests through a greater degree of connection among the elements and factors that create the conditions for learning.

### COMMUNITY + CO-LOCATION



The future of learning is based in partnerships, shared resources, and the co-location of the learning communities that increase the dimensions of where learning occurs.

### DIVERSITY



The future of learning is based upon a landscape of diverse and capable spaces that encourage new interactions, pathways for learning, and an exploration of the possibilities.

### SUSTAINABILITY



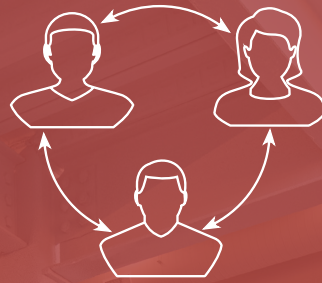
The future of learning is sustainable and adaptable. Through smart design decisions and resource-conscious choices to create flexible spaces that prepare students to thrive in a changing, environmentally aware world.

Learning Stair, Centralized between Learning Communities



## CONNECTION

At the heart of the new Cedar Falls High School design was a powerful driver: **Connection.** This concept manifested through the intentional weaving of physical spaces, learning modalities, and human relationships to create an environment where education thrives. By designing for connection, the school established conditions where learning was no longer confined to isolated subjects or rooms, but became a networked experience—dynamic, inclusive, and deeply rooted in the real world with strong ties to the community. This approach supported both academic growth and the social-emotional development essential for students and the broader community to thrive.



*Learning Stair, Centralized between Learning Communities*



## COMMUNITY + CO-LOCATION

Cedar Falls High School was guided by the principal of **Community + Co-Location**, where learning was no longer confined to the traditional classroom but emerged from shared spaces, resources, and partnerships. This approach recognized that the future of education depended on breaking down silos—not just between academic disciplines, but between the school, public industries, and the broader community. By connecting students with the community, it allowed them to engage in real-world problem-solving alongside mentors, professionals, and peers from diverse backgrounds. This model not only increased access to resources but also prepared students for a lifetime of collaboration, adaptability, and learning.



Shared Co-Learning connection to classrooms. Located within a Learning Community



## DIVERSITY

Understanding how **Diversity** of capable learning spaces would invite curiosity, foster interactions, and support a wide spectrum of learning experiences was at the forefront of the Cedar Falls High School's goals. The vision came to life through design solutions that emphasized flexibility, variety, and purpose-built environments. Each space is more than just a room; it is a tool that encourages students to take ownership of their learning journey. This diverse spatial framework expanded the definition of where and how learning occurs. It supported the idea that learning is not linear or uniform, but dynamic and personal—an exploration of possibilities that unfolded through interaction with people, space, and ideas.



*The Jungle: Located adjacent to the Main Entrance for shared academic and community use*



## SUSTAINABILITY

Learning today must be both sustainable and adaptable; rooted in smart, forward-thinking design that reflects the realities of a changing planet. At Cedar Falls High School, the principal of **Sustainability** was embedded in every aspect of the building, from materials used to the way spaces function over time. The design embraced flexibility and resource-conscious choices, ensuring the school can evolve while shifting educational needs and minimizing environmental impact. By implementing sustainability into the school, it became more than a place to learn, but a model of resilience. It equips students not only with academic knowledge, but with the mindset and tools to thrive in a future where environmental awareness and agility is essential.



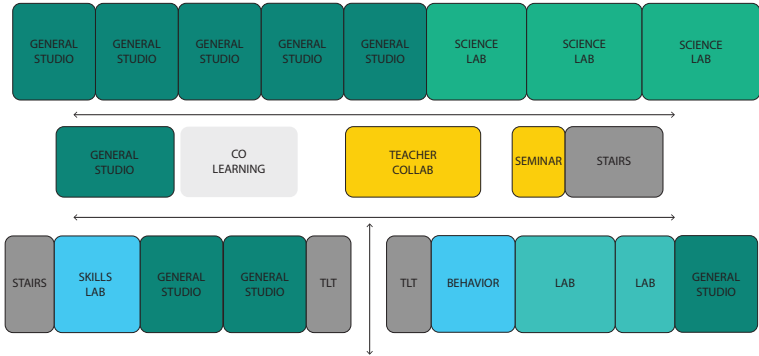
Main Entrance / Lobby: A hub for the community that has centralized access to the Gymnasium and Auditorium



# LEARNING COMMUNITIES

To create a more individualized approach to learning that allowed students to receive personalized and flexible instruction, learning communities were developed to support academic success. By dividing the 1,400-student population into four 350-student learning communities, the design provided flexibility for a variety of future teaching and educational approaches. The learning communities were surrounded by collaborative learning studios with glazing to provide “learning on display.” Within the core of each learning community were small group meeting rooms, a professional learning center for staff, and an open collaboration space. This configuration improved security, enhanced supervision, and supported a range of learning styles and activities. Integrated technology provided students with access to vast amounts of information at their fingertips, while the flexible spaces encouraged students to explore not just information, but also how it could be applied in real-world contexts. The open collaboration space allowed teachers to extend their instruction beyond the classroom, maximizing opportunities for interaction while maintaining visibility.

Each learning community was strategically assigned a color that promotes softness and a connection to nature. This color-coding approach also supported way finding between communities and was carefully selected to accommodate individuals with visual impairments. In addition, special attention was given to the emotional impact of color—soft blues and greens were used in special education classrooms to promote calmness and ease.



Typical Learning Community wing; includes, general classrooms, science labs, exploratory labs, distributed special education classrooms, shared teacher collaboration, small group rooms, and a shared open co-learning zone.



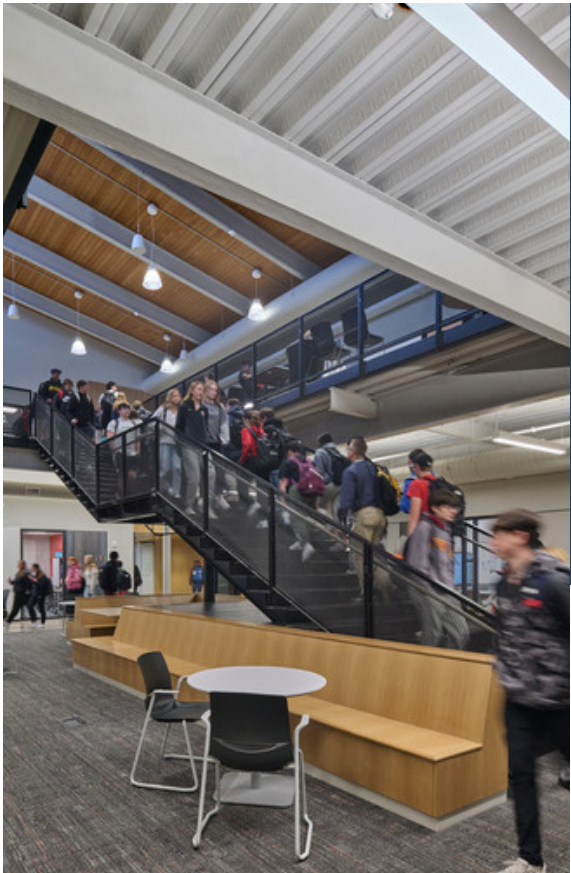
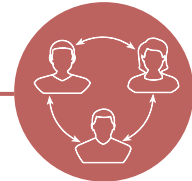
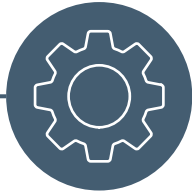
Typical Co-Learning; located on the lower level. The Teacher Collaboration space is located adjacent for connection to students as well as visibility. Glazing was strategically located into classrooms to promote connection, security and learning on display.



Typical Co-Learning; located on the main level. The end classroom includes a glazed sliding system that allows the class to spill out into the co-learning zone. Allowing teachers to distribute learning and offer options for student learning.



The main entrance into each Learning Community includes small group rooms, flexible furniture, a centralized stair to connect the two levels and a counter at the stair for more flexible touch down areas for students. The clerestory pulls daylight into the core and into the lower level.



The centralized stair connects two learning communities to one another. At the bottom of the stair is a built-in bench that allows for flexible furniture to pull up for student collaboration.

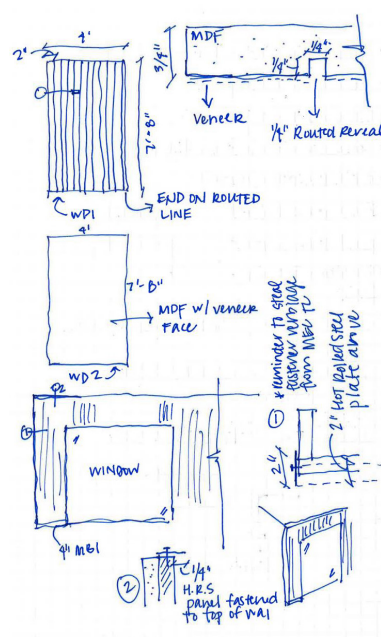


## DESIGN FOR CHANGE

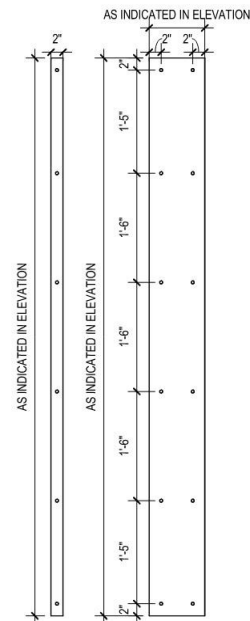
Cedar Falls High School implemented on a model where teachers do not own their classrooms, which allowed for ultimate flexibility for the school to change and adapt over time. Teachers have a centralized Professional Learning Center located within each learning community. This allows teachers to have their own space and provided a centralized location for students to find their teachers when needed. Designing for staff spaces was a critical requirement that offered support for teacher development, basic needs, and a space that offered resources for teachers to collaborate with one another.

## DESIGN FOR RESOURCES

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



## WOOD VENEER PANELS



## HOT ROLLED STEEL PANELS



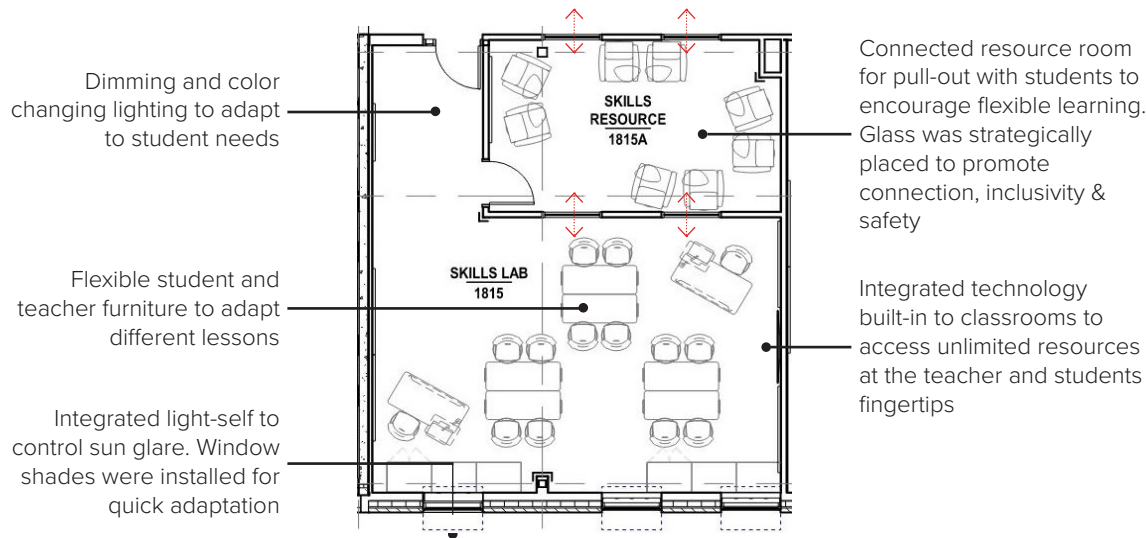
The design incorporates warm wood tones on the roof and walls to create a welcoming and calming atmosphere. The design maximizes daylighting through large windows and a clerestory, enhancing mood and productivity, while acoustic materials on the walls reduce noise and ensure a focused learning environment. Together, these elements support a space that promotes well-being, collaboration, and effective learning.



# RESOURCES FOR ALL

## INCLUSIVITY & ADAPTABILITY

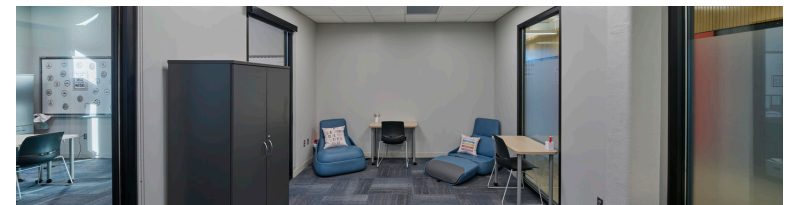
Placing inclusivity and adaptability at the core of its shared resources and collaborative spaces allows all learners, no matter their background, endless opportunities for success. Cedar Falls High School was designed to welcome all learners. The shared collaborative spaces ensured that every student, regardless of ability, background, or learning style, felt empowered to engage, participate, and experience a sense of belonging. The school dedicated time in their schedules, known as 'Power Hour,' to allow students to seek help with academics, collaborate with others, study, or take a test—offering endless options for students. This allowed students to have dedicated time for their needs and academic success. The programs was intentionally and strategically designed to promote open, flexible, and easily reconfigurable spaces to support a variety of group sizes, activities, and accessibility needs. Learning communities, interdisciplinary labs, and shared group rooms were designed with universal access in mind, featuring adjustable furnishings, clear way finding, and integrated technology that leveled the playing field. This encouraged interactions across grade levels and learning profiles, fostering a culture of respect, creativity, and collective growth.



Skills labs offers a dynamic layout that promotes student centered learning with flexible furniture and an in-class resource room for students to have one-on-one breakout with teachers, mentors and other students. Windows were strategically placed to promote learning on display while still offering visibility for security and safety.



Within the Media Center, small group rooms were strategically placed to connect to the environment. The glazing offers a writable surface as well as visibility for staff and natural daylight to enter into the core space. Flexible furniture allows for students to collaborate and adapt.



The connected resource room includes dimmable lighting and flexible furniture for student choice in their learning. Windows into the classroom have window shades when privacy is needed and frosted window film to the corridor to promote connection and privacy.



# LEARNING BEYOND THE CLASSROOM

## COLLABORATING WITH PROFESSIONALS FOR ACADEMIC GROWTH AND CAREER EXPERIENCE

Cedar Falls High School developed a professional development program in 2017 that contributed directly to student and industry engagement by fostering collaboration with real-world professionals. The Cedar Falls Center for Advanced Professional Studies (CAPS) program was a nationally recognized, innovative initiative that prepared students for their future by immersing them in professional environments. Through numerous partnerships between education and industry, the CAPS program placed students in real-world settings where they applied their learning and skills to authentic projects and problems while collaborating with community and business partners. This personalized approach enhanced traditional learning and helped develop the workforce leaders of tomorrow.

Through workshops, user group meetings, and hands-on planning, staff and students worked closely with the design team to help shape flexible, career-focused environments that mirrored real-world settings. From innovation labs to collaborative commons and career pathway spaces, each area was designed to foster engagement with the broader community and provide authentic, hands-on learning experiences.

The new Cedar Falls High School placed a strong emphasis on career-based academics. By integrating CTE spaces such as a woods lab, metals lab, and automotive lab, the school was designed to accommodate project-based learning, real-world simulations, and business mentorship opportunities.



***“The new school provides the right environment for students to really lean into the development of important durable skills like problem solving, conflict resolution, collaboration, adaptability, resilience, etc.”***

**- Ethan Wiechmann, Director of CAPS**



*Known as “The Jungle” this space is dedicated for the community, students and professionals to work hand-in-hand. The space is split by an operable partition to allow for small group work or a large gathering. Technology was integrated for ultimate flexibility of the space.*



*The CTE labs includes a Wood Lab, Automotive Lab, and a Metals Lab. This allows students to enroll in curriculum that interests them and their future goals beyond high school. The programs offer state-of-the-art technology and equipment to provide endless opportunities, future flexibility, and growth.*



# DESIGNED TO SHARE

## SPACES THAT ARE SHAPED FOR THE COMMUNITY

At Cedar Falls High School, education doesn't end when the bell rings, and neither does it's role in the community. With its state-of-the-art gymnasium, auditorium, and football stadium, the school has become a vital hub not just for students, but for families, neighbors, and organizations throughout the town. These spaces reflect a deep commitment to building stronger connections, fostering wellness, and create opportunities for everyone in Cedar Falls.

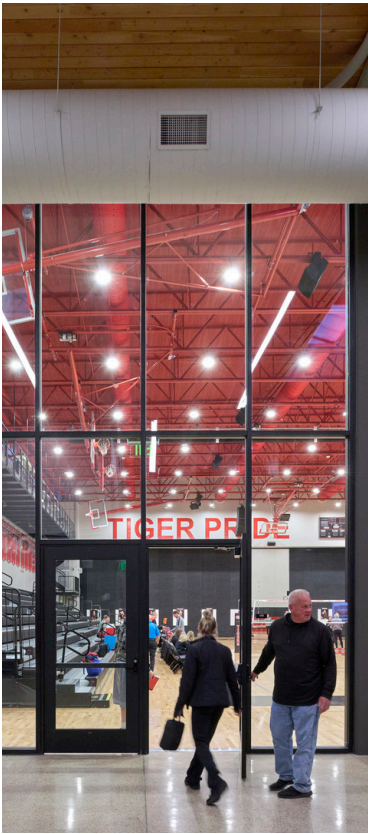
Tiger Pride shines bright on the new campus of Cedar Falls High School. The powerful statement that schools don't exist apart from the community, but they are the community could not be more true for Cedar Falls community. By designing multipurpose spaces that welcome all ages, background, and needs, the school has become more than an educational institution. It's a shared resource, a public square, and a living symbol of what's possible when education and community go hand in hand. As Cedar Falls continues to grow and evolve, the high school stands ready, not just to teach, but to serve, connect, and uplift the community.



The Competition Gymnasium reflects Cedar Falls pride through its bold red-painted acoustic deck structure. Sized to fit 1,400 spectators and connected to an auxiliary gymnasium, separated by a large operable partition that allows for flexible use of the space. The gym features one full-sized basketball and volleyball competition court, along with three additional practice courts. Included are elevated catwalks on both sides for media coverage during games.



The 800-seat Auditorium at Cedar Falls High School is a state-of-the-art venue that supports student performances and hosts community events. Designed with sustainability in mind, it features warm wood finishes, durable metal panels, and ceiling lights that resemble a starry sky. Beyond its role in the arts, the auditorium is also built to serve as a storm shelter, adding safety and resilience to its purpose.



The Competition Gymnasium features community access at both ends, with large glass walls that provide visibility and create a striking, jewel box-like appearance.



The Strength and Conditioning room is connected to the Auxiliary gymnasium by glass overhead doors that offers easy access for events and daily use. The facility is equipped with advanced athletic equipment, while acoustic panels help manage sound. Environmental graphics were designed to add a sense of pride, reinforcing school spirit and motivating athletes.



The community-focused Performance Stadium features an 8-lane track, a turf field for football and soccer, and seating for 4,700 spectators. The facility also includes modern stadium lighting, a press box, sound system and large scale display screen, locker rooms, concessions, and a visitor facility with bleachers. Looking ahead, Cedar Falls Athletics will expand with the addition of an indoor Natatorium and Indoor Performance Center, which are currently under construction.



# FLOOR PLAN

## Process To Product

### TESTING THE FORM

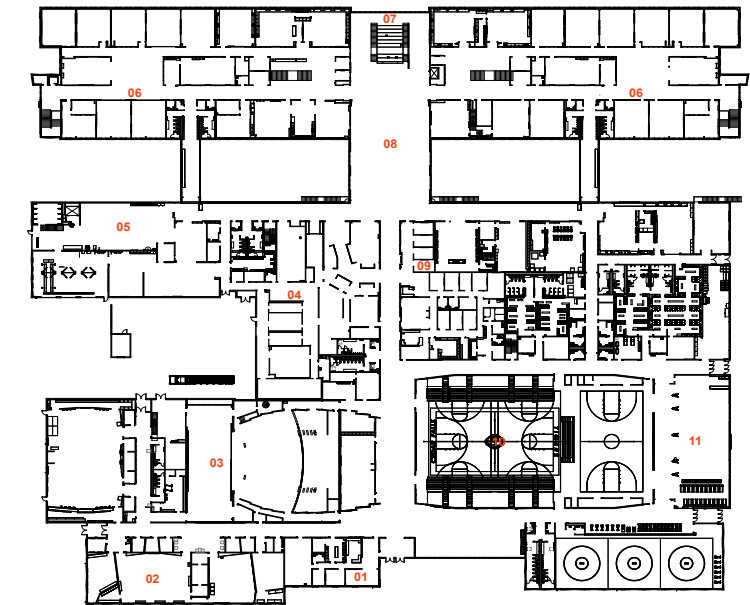
During the design phase of the new Cedar Falls High School, the design team dedicated several months to thoughtfully evaluating programmatic needs and exploring a wide range of floor plan options. This collaborative process involved working closely with district leaders, educators, students, and community members to deeply understand how the building could best support both current and future educational goals.

The key focus was creating a layout that reflects the values of the Cedar Falls community. With that in mind, the front of the building was intentionally designed to be community-facing—housing public and shared spaces such as the competition gymnasium, auditorium, and activity areas—to welcome engagement and foster school pride. In contrast, academic wings were placed toward the back of the site to create a focused, secure environment that supports concentration and collaboration among students and staff.

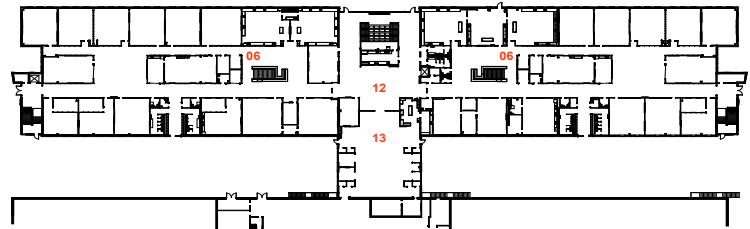
Flexibility was central to the design strategy, ensuring that spaces can evolve with educational trends and technology over time. The result is a future-ready learning environment tailored to the unique identity and needs of the Cedar Falls community.



### THE PRODUCT

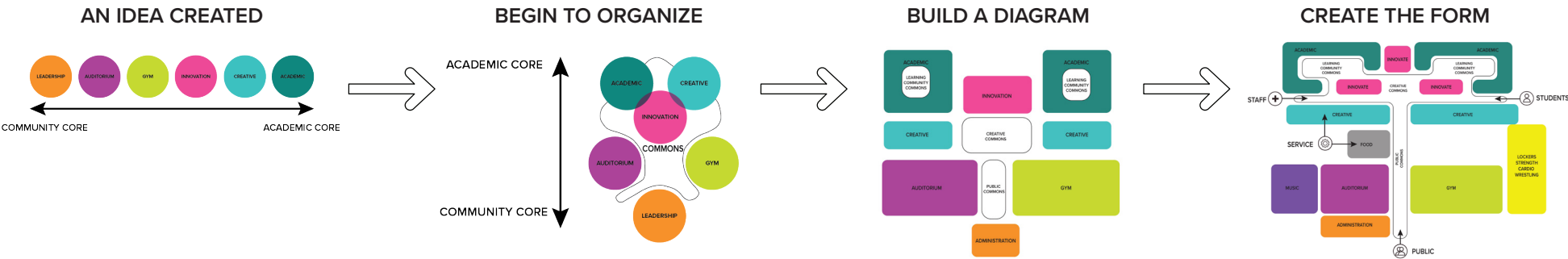


MAIN LEVEL



LOWER LEVEL

- 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







***“LEARNING IS NO LONGER  
LIMITED BY TIME AND SPACE”***



# SITE SELECTION

## BUILDING ON THE EDGE

The maps below show the core city development within Cedar Falls from 1950 through projections extending over the next 70 years. Originally established south of the Cedar River, Cedar Falls has steadily expanded outward. When the original high school was built, it sat on the edge of town—but over time, that location became more central as the community grew.

Today, the new Cedar Falls High School is located on the current edge of development. However, considering historic growth patterns and projected expansion to the west and south, it's likely that this area will also become a central part of the city in the coming decades. The school's location, along with its adaptable, future-ready design, positions it to serve the community well for generations to come.



The main entrance of Cedar Falls High School features a well-lit, covered plaza known as the "Front Porch," which includes a bike rack for student use. The City of Cedar Falls is committed to building accessible bike paths that connect the high school to neighborhoods and community spaces, encouraging safe and sustainable transportation for students and beyond.

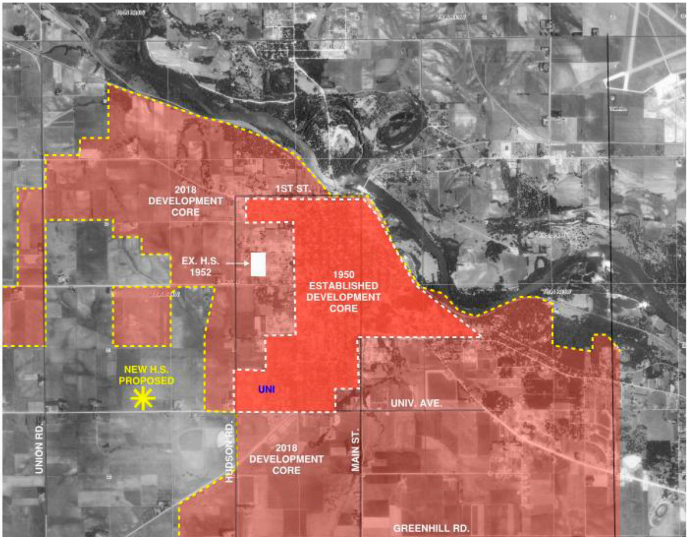


PHYSICAL ENVIRONMENT DESIGN

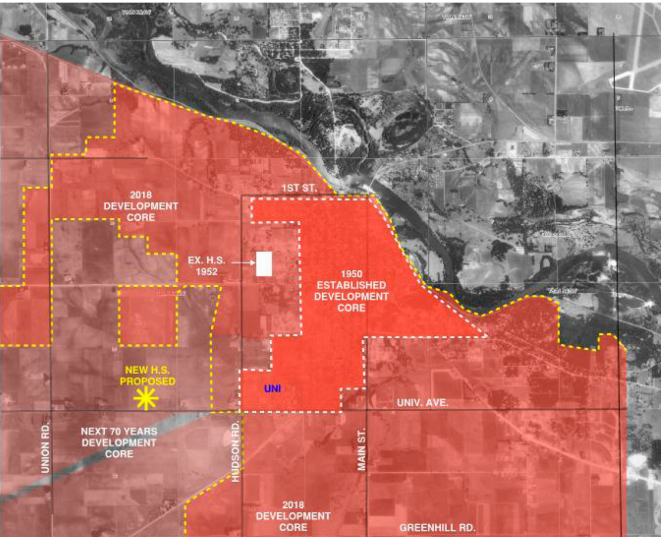
CEDAR FALLS HIGH SCHOOL



1950



TODAY



TREND (NEXT 70 YEARS)



# SITE STRATEGY

## BUILT ON SUSTAINABLE LAND TO CREATE ENGAGED MINDS AND RESILIENT LEADERS

The site strategy for Cedar Falls High School emphasizes both sustainability and meaningful community collaboration. In partnership with organizations such as the Dry Run Creek Association and the Tall Grass Prairie Center, the district worked to enhance local ecosystem health by incorporating native plantings that support pollinators, birds, and other wildlife—while also reducing long-term maintenance needs.

These sustainable practices extend beyond landscaping. Outdoor learning spaces were intentionally designed to connect students with nature, enriching their educational experience. Daylight-filled learning studios and a central courtyard planted with indigenous vegetation offer daily exposure to the natural environment. Biology and science labs on the first floor open directly to outdoor learning areas, encouraging hands-on exploration and environmental awareness.

The site plan reflects a broader commitment to sustainability, education, and community values—transforming the campus into a living, learning ecosystem that serves both students and the greater Cedar Falls community.

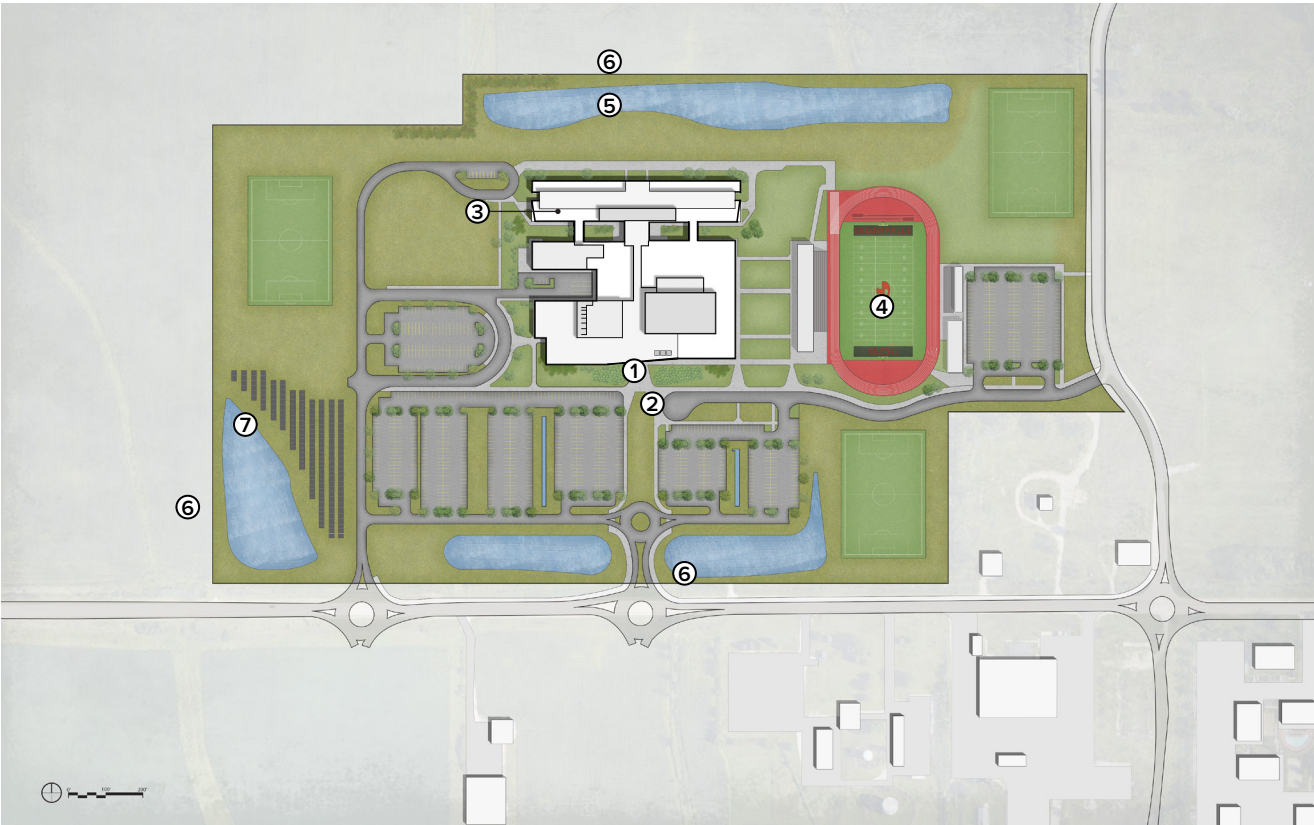


ACRES OF NEW PRAIRIE SEEDING



RESTORED SITE TO NATIVE ECOSYSTEMS

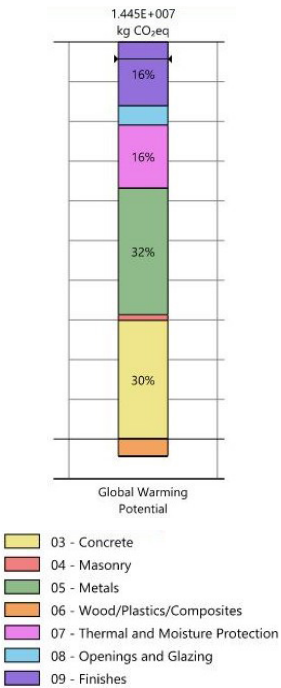
- ① Main Entrance
- ② Bus Loop
- ③ Outdoor Learning
- ④ Stadium & Concessions
- ⑤ Restored Prairie Habitat
- ⑥ Storm water Management
- ⑦ Utility Company PV Array Partnership





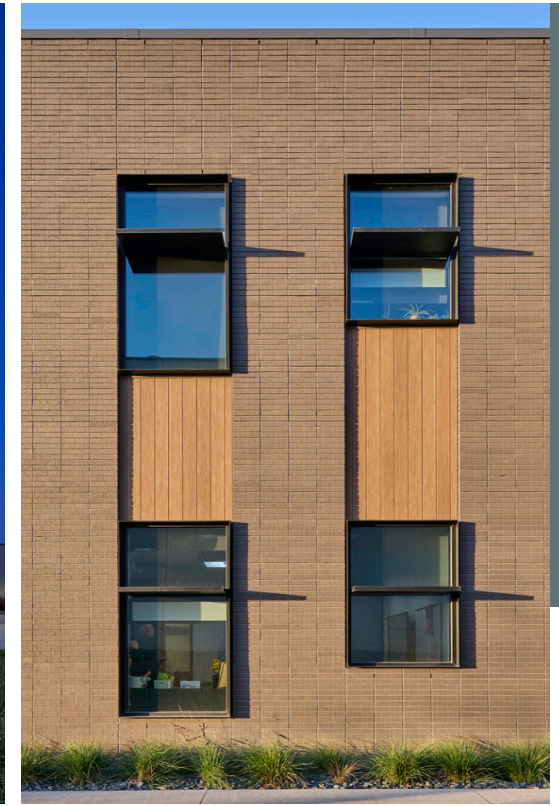
# RESPONSIBLE DESIGN IS GREAT DESIGN

Longevity and durability were key factors when selecting exterior materials for the Cedar Falls High School that is aiming to serve the community for the next century. Exterior materials include brick veneer, insulated precast concrete walls, wood decking, and fiber cement. Tally, a Life Cycle Assessment (LCA) tool, was utilized as an embodied carbon evaluation tool which led to the selection of a brick veneer over alternative options such as aluminum metal panel, due to it's lower embodied carbon, grated longevity, and ability to be locally sourced and installed. Precast walls were utilized as a durable option that has minimal maintenance requirements and could also be locally sourced.



The 2-story Learning Community wings feature durable brick veneer, precast panels, and wood-look materials, balancing warmth and resilience. A clerestory brings natural daylight into the interior. The design also includes integrated security features, such as surveillance cameras, secure access points, and well-lit exteriors, ensuring safety while maintaining an inviting atmosphere.





## MATERIALS AND FORMS WITH MEANING

The architecture of Cedar Falls High School is a thoughtful integration of form, function, and materiality—creating a cohesive environment that supports learning, celebrates community, and embraces sustainability. Every architectural move and material choice was guided by the desire to create a lasting, high-performance building that feels both grounded in place and adaptable for the future.

The building's layout is organized to promote clarity, connection, and flow. A strong architectural framework defines key circulation paths and learning zones, while open, light-filled common areas foster collaboration and interaction. The design intentionally balances transparency and solidity—using large expanses of glass to create visual and physical connections to the outdoors, while more grounded, durable materials provide structure, warmth, and protection.

Material selection played a central role in reinforcing the architectural vision. Locally sourced brick and concrete establish a sense of permanence and regional identity, while natural wood tones introduce warmth and texture throughout key interior spaces. These materials were chosen not only

for their aesthetic qualities but also for their durability and low environmental impact. Together, they create a tactile, inviting environment that resonates with students, staff, and the broader community.

Sustainability is not an add-on but a fully integrated part of the design. High-performance glazing, energy-efficient HVAC systems, and thoughtful daylighting strategies reduce the building's operational footprint. The integration of native landscaping and storm water management systems supports the health of the local ecosystem, while outdoor learning areas extend educational opportunities beyond the classroom walls.

This seamless blending of architecture and materials results in a building that is more than a school—it is a civic landmark. Cedar Falls High School embodies the values of the community it serves, standing as a testament to how design excellence, material integrity, and environmental stewardship can come together to shape a vibrant, enduring place of learning.

## DESIGNING FOR PEOPLE

Cedar Falls High School's design seamlessly blends openness and scale, with expansive windows and courtyards that bring in natural light and offer views of the outdoors. This integration fosters a welcoming, human-scale interior while enhancing visibility and connection to the surrounding landscape. Large glass expanses create a seamless flow between indoor and outdoor spaces, reinforcing a strong visual connection to nature.

A key design feature is the “front porch” experience, where the entrance serves as an inviting transition between public and educational spaces. Sheltered overhangs and transparent glazing create a gathering space that connects the community to the school. The building's massing and layout embrace the landscape, allowing natural light to flood the interiors and enhancing the overall learning environment. This thoughtful combination of architecture and site design promotes a sense of pride and ownership, making Cedar Falls High School a civic landmark that reflects the values of the community.



# DESIGN FOR ENERGY

## Sustainable Strategies

87

CODE BASELINE EUI

44

PREDICTED EUI

9

POST SOLAR PANEL  
INSTALLATION EUI



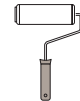
### Energy

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



### Location & Site

- ④ Native Plantings
- ⑤ Light Materials



### Materials

#### Durability

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

#### Energy

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



### Health & Wellbeing

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



### SMART LEARNING, GREEN THINKING

Cedar Falls High School embraces a symbiotic relationship between human and non-human inhabitants by fostering ecological health and awareness. The school partnered with Tall Grass Prairie Center, associated with the University of Northern Iowa, on the project. The design prioritized native plantings and restored approximately 37% of the site to native ecosystems, including 23.6 acres of new prairie seeding. As part of this partnership the Tall Grass Prairie Center salvaged several native plant species that were on the existing site and reintroduced them into the landscaping to preserve and restore the area's natural heritage. Low-mow grasses and native prairie plantings reduce the time and fuel required for regular mowing and maintenance. These efforts support pollinators and other wildlife vital to the region's ecological balance, creating a thriving habitat that sustains local biodiversity.

Secure courtyards were created to provide natural light and views to what could have been interior spaces. This offered an opportunity where indigenous vegetative species would thrive and a location for students relax, socialize, engage, and learn with nature. The courtyards create an outdoor learning environment where hands-on-learning can occur.

Inserted courtyards allows all learning spaces to access natural light while also providing exterior break-out and social spaces for the school. Gating allows for the space to be secure, while also inviting students to occupy the space freely.



# THE SCHOOL THAT BUILT MORE THAN WALLS

## A NEW START TO THE FUTURE OF LEARNING

The New Cedar Falls High School project has had a transformative impact on both teachers and students, creating a future-ready learning environment that supports educational goals and objectives. Teachers have found the flexible learning zones and modern educational practices to be incredibly beneficial, allowing them to tailor their teaching methods to meet the diverse needs of their students. The integration of natural light and adaptable spaces has not only enhanced the academic experience but also promoted personal growth and development among students. One teacher remarked, "The new facilities have revolutionized the way we teach, providing us with the tools and environment to inspire and engage our students like never before."

In alignment with the school district's goals, the New Cedar Falls High School addresses the need for a modern educational facility that can accommodate the growing student population and replace the aging infrastructure of the old high school. The project has fostered a sense of pride among teachers and staff, who appreciate the district's commitment to sustainability, equity, and innovation. By partnering with organizations like the Dry Run Creek Association and the Tall Grass Prairie Center, the district has enhanced ecosystem health through native plantings and outdoor learning spaces. This collaboration has provided students with hands-on educational opportunities that connect them with nature, enriching their learning experience and fostering a deeper appreciation for the environment.

The impact of the New Cedar Falls High School extends beyond the classroom, achieving significant community goals by fostering a strong sense of civic pride and engagement among Cedar Falls residents. The new high school serves as a hub for community activities and events, strengthening the bond between the school and the local community. Unintended results and achievements of the project include the creation of a harmonious relationship between the built and natural environments, which has fostered an appreciation for the natural world among students. Additionally, the project demonstrates good stewardship of financial resources by utilizing sustainable design practices and efficient use of space, ensuring long-term value for the community. One student shared, "The new school has not only improved our learning experience but also brought our community closer together, making us proud to be part of Cedar Falls."



The community celebrates the ribbon-cutting with hundreds in attendance.



*"The new facilities have revolutionized the way we teach, providing us with the tools and environment to inspire and engage our students like never before."*

*- CFHS teacher*



Students enter the new Cedar Falls High School for the first day of school in August 2024.

*"The new school has not only improved our learning experience but also brought our community closer together, making us proud to be part of Cedar Falls."*

*- CFHS student*