



**Winifred Public School Transformation  
Winifred, Montana**



## executive summary.

### A Community-Focused Vision

In rural Winifred, Montana, population 200, the Winifred K12 School transformation project arose from the collective aspirations of a community deeply connected to its agrarian roots.

The Winifred School has always been special, regardless of its facilities – with an open culture of shared community use, a mentoring program between its high school and elementary students, and an athletics program that brings the entire community together with pride.

### Generosity Fueling Transformation

Envisioned and funded by benefactor Norm Asbjornson, a successful engineer and native of Winifred, the project aimed to give back to a community that already gave so much. A full renovation and expansion of the existing K-12 school transformed it into a 21st-century educational, athletic, and community hub.

Asbjornson, the founder of AAON, Inc., attributes a large part of his success to his Winifred roots. He has long admired the people's dedication to making the town a welcoming and supportive place. Inspired by his community's vision and work ethic, Asbjornson gave back in a big way, investing in Winifred's future with an ambitious dream.

His vision included providing a high level of education that sets the foundation for students to enter into a postsecondary education program at an advanced level to allow them to pursue impactful fields that they can bring back to their community (agriculture, engineering, education, aviation, and the trades).

### scope of work and budget

#### GRADES

k-12

#### SIZE

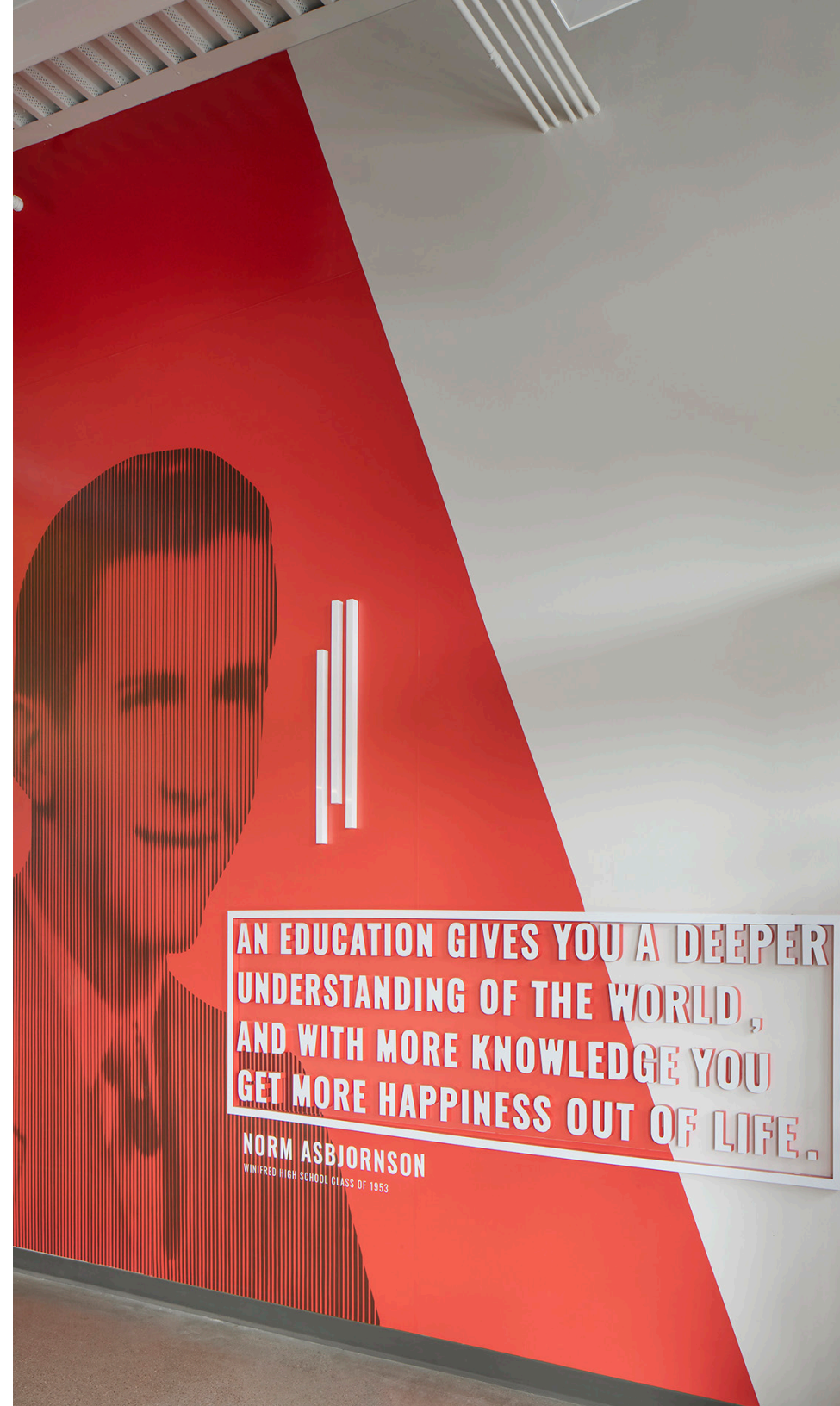
101,000 sf

#### COST

\$38.9M

#### STUDENTS

130



# executive summary.

## Envisioning New Futures

What would be possible if rural communities had access to first-class, state-of-the-art educational, athletic, and community facilities? How would that transform the community, the school, and both individual and collective futures? What facilities offer the greatest impact, value, and service to students?

## A Model for Success

This transformative project answers those questions by revitalizing a historic school structure, creating a vibrant environment that honors the past, embraces the present, and prepares for the future. The project embodies the core values of the Association by fostering an exemplary learning environment through a truly visionary reimagining of the school and the creation of facilities that offer not only new opportunities, but open the door to entirely new dreams and life paths for Winifred students.

## Community Collaboration, Innovation, and Pride

The success of this project is deeply rooted in the collaborative efforts of the Winifred community, local stakeholders, benefactor Norm Asbjornson, the design team, and project contractors. Through continuous engagement and a shared dream, the project harnessed local assets and innovative design to create a learning environment that is inclusive, adaptable, and forward-thinking. It stands as a new landmark in Winifred, enhancing the town's character and fostering community pride while creating meaningful opportunities for locals to connect, grow, and succeed together.

## Cultivating a Collective Dream

Students and the Winifred community were united through a collaborative design process and continuous, meaningful engagement, ensuring the final concepts reflected collective aspirations rooted in local values and identity.

Consisting of teachers, coaches, parents, facility staff, and the Superintendent, the Planning Committee played a crucial role in shaping the project. Their collective efforts provided recommendations to the school board regarding future facility needs and opportunities for Winifred School. The committee members, representing distinct facets and perspectives of the Winifred community, became ambassadors for the project, engaging with the broader community for input, contributions, and buy-in.

**WINIFRED**  
The history of the small town on the Hill

Winifred saw its share of colorful history comprising of trappers, Indians, settlers, and homesteaders leading back to the 15th Century. The actual town was founded in 1913 as the terminus of a newly built branch line of the Milwaukee Road. It is popularly believed to have been named after one of the railroad owner's two daughters.

**1843**  
**THE BEGINNING OF TRADE**  
Charles Hennepin was the first to document the Milwaukee River in 1680. In 1843, the Wisconsin Territory was established, and the Milwaukee River was the terminus of a newly built branch line of the Milwaukee Road.

**1860**  
**STEAMBOAT TRAVEL**  
The first steamboat on the Milwaukee River was built in 1860. It was used for passenger and freight service between Milwaukee and Winifred.

**1877**  
**CHIEF JOSEPH**  
Chief Joseph and his band of Nez Percé warriors fled to the hills near Winifred in 1877. They were captured and taken to a reservation in Idaho.

**1884**  
**EARLY SETTLERS**  
The first settlers in Winifred were the Johnsons, who arrived in 1884. They were followed by other families, including the Smiths and the Browns.

**1910**  
**INFUX OF PEOPLE**  
The arrival of the Milwaukee Road in 1910 brought a large influx of people to Winifred. Many of these people were looking for work on the railroad or in the logging industry.

**1913**  
**WINIFRED IS FOUNDED**  
Winifred was officially founded in 1913. The town was named after one of the railroad owner's two daughters.

**1920**  
**THE FIRST SCHOOL**  
The first school in Winifred was built in 1920. It was a small, one-story building that served the community for many years.

**1940**  
**EVENT HERE**  
A significant event occurred in Winifred in 1940. This event marked a turning point in the town's history.

**1958**  
**EVENT HERE**  
Another important event took place in Winifred in 1958. This event further shaped the town's identity.

**1960**  
**EVENT HERE**  
A notable event occurred in Winifred in 1960. This event demonstrated the town's resilience and growth.

**1966**  
**CULTIVATING THE LAND**  
The process of cultivating the land in Winifred began in 1966. This process was essential for the town's development.

**1985**  
**EVENT HERE**  
A significant event occurred in Winifred in 1985. This event highlighted the town's progress and achievements.

**1996**  
**EVENT HERE**  
Another important event took place in Winifred in 1996. This event further solidified the town's status as a vibrant community.

**2021**  
**WINIFRED TODAY**  
Winifred today is a thriving community with a rich history and a bright future. The town has grown significantly since its founding in 1913.

**DID YOU KNOW?**  
Winifred is the only town in Wisconsin named after a woman. The town was named after one of the railroad owner's two daughters.



# school & community research and engagement.

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## Rooted in Rural Identity

Winifred is a small, tight-knit community with deep connections to its agricultural heritage and the Missouri River Breaks region. The residents' pride in their relationship with the land, commitment to environmental responsibility, and dedication to the ranching lifestyle guided the trajectory of this project.





## school & community research and engagement.

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### Engaging Local Voices

Continuous engagement with stakeholders kept the project aligned with its inclusive vision, addressing diverse educational, athletic, and community needs. In a small town like Winifred, this singular school represents immense value, fostering pride and serving as a vital resource for current and future generations.

The engagement process involved continuous, open dialogue with the community through various channels, including community meetings held at the existing school. These meetings provided a platform for residents to learn about the project, share their insights, and offer feedback on the additions and renovations. This approach ensured that the project not only reflected the community's needs and values but also fostered a sense of ownership and pride among the residents.

Focus groups, comprised of teachers and staff representing different areas of curriculum and school operations, gathered detailed room data and curriculum needs, ensuring that the new facilities would meet the diverse requirements of the school and its programs.

### Process: Visioning & Goals

The visioning process aimed to identify and refine the project goals that would guide the design.

The Planning Committee explored the key question:

**“How do we want to grow strategically and thoughtfully into the future?”**





## **school & community research and engagement.**

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To address this, the Planning Committee was asked to consider the question as it related to community values, program needs, student development, operations, and athletics. The committee's discussions helped identify past successes and challenges, guiding the project outcomes to ensure the best possible school for Winifred. The visioning process emphasized strategic and thoughtful growth, ensuring the project aligned with the long-term aspirations of the community.

## **project goals.**

- 1.** Enhance the **student experience**.
- 2.** Foster **educational excellence**.
- 3.** Provide schools that assure the **safety** and **security** of students and staff.
- 4.** Develop an **achievable** and **affordable long-term** concept for Winifred Schools.
- 5.** Develop facilities that **create community pride**.

### **Shared Challenges and Successes**

The project overcame significant challenges with the creative problem-solving and resilience which is characteristic of rural Montanans:

- Expanding and renovating the historic school structure while students were in attendance
- Managing property adjacencies with neighboring landowners to ensure smooth access and integration
- Incorporating advanced vocational and technical curricula into the school's design
- Navigating logistical challenges posed by the remote location, affecting resource availability and procurement

### **Harnessing Local Resources for a New Landmark**

Located among flat and rolling-hill agricultural land, the school is near the town center, ranches, and residential areas, with the Upper Missouri River Breaks recreation area just 12 miles away. This central location makes the school easily accessible and a pivotal part of the community, enhancing its role as a communal hub – and the importance of it as a resource.

The project leveraged numerous assets, including the existing school structure, surrounding land, geothermal well fields, and repurposed remote building structures.



# school & community research and engagement.

We took the Planning Committee and community through a three steps process:

## 1. VISIONING

discover

**demographic analysis**  
of school for trends, growth, and future needs

visioning

**understand the facility**  
educational facility analysis, site & building analysis

**understand the educational vision**  
district-wide understanding - all grade levels



## 2. EXPLORATION

community involvement

**creative solutions**  
education vision, demographics, site, students, budget

develop alternatives

**master plan draft**  
recommendations and community feedback

achieve consensus

**master plan final**



## 3. IMPLEMENTATION

fund

**develop funding program and plan**

plan

**design, schedule, bid, phase**

build

**construct, remodel, finish**

completion

**occupancy**





# physical environment.

Based on input from user groups and stakeholders, the design process focused on creating an improved circulation plan that achieved the vision and goals identified during programming meetings. The renovation and expansion of the Winifred K12 School more than doubled the existing space, transforming it into a comprehensive facility that supports educational, athletic, and community needs.

## winifred (plan diagram)

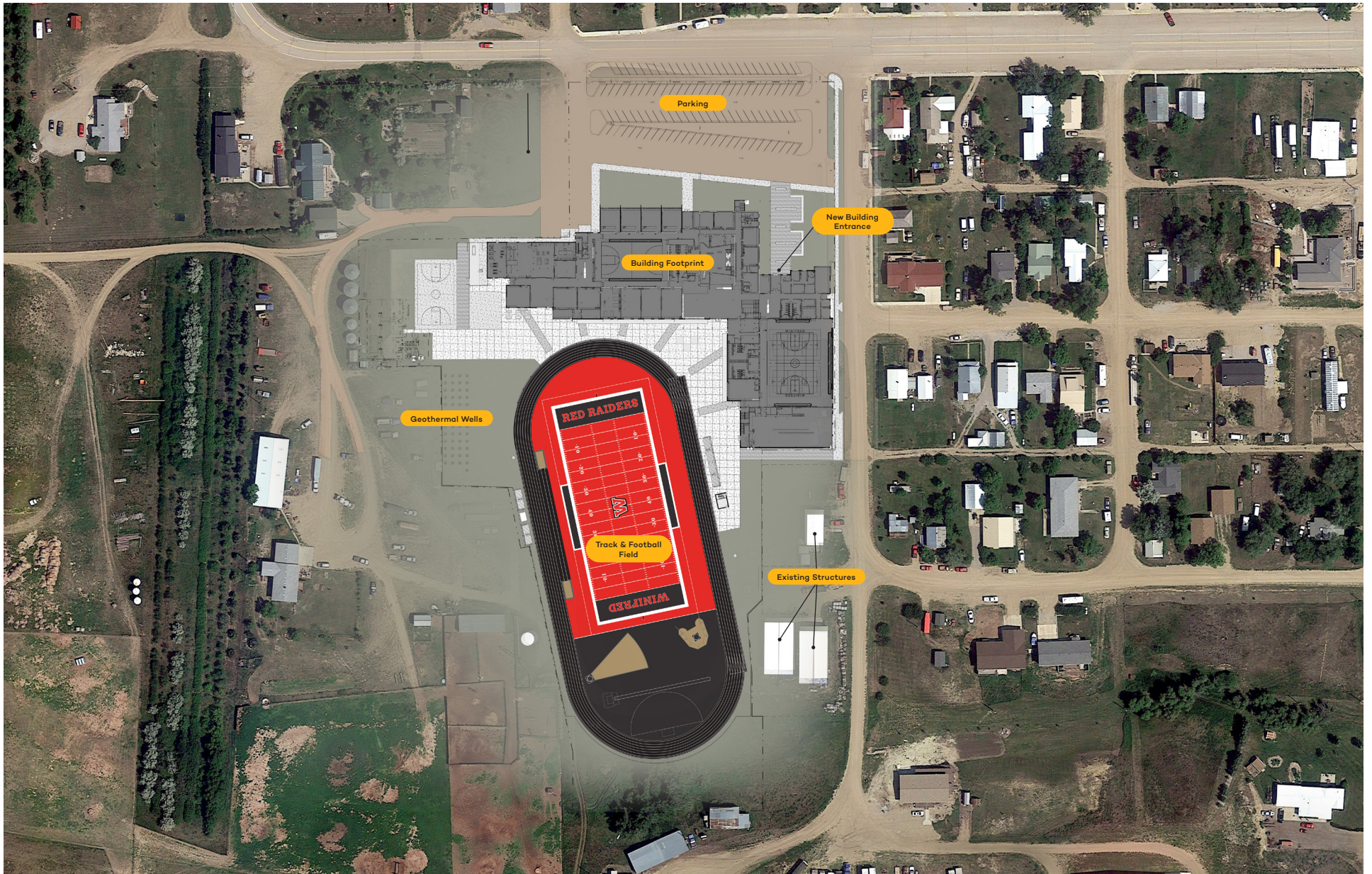
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physical environment.

**winifred** (site diagram)





## physical environment.

### Comprehensive Facilities

The programmatic spaces were arranged around the existing school's layout, with new spaces strategically branching out from there.

- Commons/cafeteria, library, interactive learning stair, and administrative core located at the "heart" of the school
- Noisy and essential building function spaces such as the shop, gym, music room, and mechanical spaces placed at the furthest points of the additions

### Advanced Athletics

Winifred School's sports and athletics programs are a key point of local pride. The athletic complex is equipped with versatile, modern amenities for both competitive sports and community events.

- State-of-the-art gym with retractable bleachers, a dividing curtain, motorized clerestory glazing roller shades, and advanced A/V equipment
- Supports a wide variety of activities, including basketball, volleyball, and community performances
- New track and field facility for outdoor athletics, enhancing the school's capacity to host regional competitions and events

### Cutting-Edge STEAM Wing

These facilities provide students with advanced tools and flexible spaces for hands-on learning, preparing them for future careers in agriculture, science, engineering, and technology.

- High-tech and vocational educational facilities
- Advanced science labs / greenhouse / vertical garden
- Vocational shop room designed to collegiate-level standards

The design incorporates collaborative and shared learning spaces for various age groups and developmental stages, fostering mentorship and enriching educational experiences.







## physical environment.

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### **A Living Legacy: The Moss Wall Mural**

A centerpiece of the project vision, both physically and philosophically, was the creation of a moss wall mural that intricately maps the region's topography – its undulating hills, vast plains, and the winding Missouri River, a lifeline for local farms and ranches. This river, crucial to Winifred's livelihood and sustenance, nurtures a unique multi-generational bond between residents and their environment, highlighted by a historic ferry nearby that connects the community across its waters.

### **Shared Sense of Place**

Extending over 24 feet in the commons area, the moss wall invites students and community members to trace the land's contours and locate their homes, family lands, and historic ranches. By omitting property boundaries, the mural reflects the essence of shared resources and collaboration, embodying the spirit of the American West. Every aspect, from sourcing resilient moss varieties capable of thriving in Montana's dry climate to protecting it from curious students with high vertical placement and transparent plexiglass protection, balanced aesthetic appeal with practicality and durability. This ecological artwork represents a transcendent bond between the people and the land, encapsulating the town's history and ambitions, and underscoring the power of community-driven design.





# physical environment.

## Interior Design for School Spirit

The interior design honors the building's historical character by blending new and original elements. Key spaces are highlighted with restored materials like wood and brick, while the school's colors are thoughtfully integrated throughout. Experiential Graphic Design (EGD), merging artistic magic and strategy, turned walls into immersive, identity-rich stories, including a celebratory tribute to a beloved late music teacher. The redesigned Red Raider mascot is featured throughout the campus, from bold graphics to wayfinding – all elements work together to foster a vibrant atmosphere of school spirit and community pride.

RAIDER IRON

RAIDER GRAPHITE

RAIDER FIRE

WINIFRED GOLD

WINIFRED BRONZE





## physical environment.


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### A Central Hub of Community Engagement

The commons, learning stair, and library occupy the central “heart” of the school to provide ease-of-access for both students and the community, throughout the school day and during after-hours use. The gym, jogging track, and fitness areas are conveniently located adjacent to the outdoor courtyard, bleachers, and track & field, for spill-over spectator seating and a visual connection between athletic activities. Even the enclosed temperature-controlled bus barn recognizes the importance of neighboring communities by providing a safe and convenient means for regional school teams to access the gym and locker rooms during competitive sporting events.

### Creating a Welcoming Exterior

The exterior design uses materials that complement the historic school and introduce modern, regionally responsive cladding systems. Extensive storefront and curtain wall glazing create a visually inviting presence, symbolizing transparency and openness. This expansion more than doubles the school’s footprint, providing a substantial facility that can accommodate community growth for years to come.



Exterior materials were thoughtfully selected to preserve the richness of the school’s original brick facades, maintaining continuity between the exterior and interior spaces. Durable and long-lasting materials such as metal panels were also selected which complements the original and new brick.





**HOME OF THE RAIDERS**

Carefully preserving the school's core historic character by allowing the brick facades to remain throughout both the interior & exterior, retaining the original wood ceiling in the existing multipurpose room (new library), preserving original wood floors that are still in good condition, and allowing a coal-fed boiler to remain as the primary means of hydronic heating for HVAC systems were important aspects of the renovation.



# physical environment.

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## Inclusive Learning Environments

The design incorporates collaborative and shared learning spaces for various age groups and developmental stages, fostering mentorship and enriching educational experiences. Diverse spaces, including the new gym, communal commons, special education classrooms, vocational shops, and subject-specific educational classrooms, ensure inclusivity and support for all students.



## Green Design for Better Living

- Prioritizing humans and habitat throughout all spaces, natural daylighting enhances the built environment and human experience, connecting students, staff, and visitors with the outdoors
- Biophilic integration offers hands-on opportunities for horticulture and agricultural education through the vertical garden and greenhouse, improving the ambiance and educational experience
- Cutting-edge mechanical systems, including a geothermal well field and rainwater harvesting, ensure efficient and sustainable operation
- LED lighting, low-water use plumbing fixtures, and a solar wall for pre-heating fresh air exemplify the project's commitment to environmental stewardship
- Operable skylights, motorized and manual roller shades, and large roof overhangs enhance user comfort and energy efficiency, while radiant heat floor slabs improve thermal comfort throughout the expansion area





# educational environment.

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## Great Learning Spaces

What makes great learning spaces? The team reviewed variations of four key spaces that are essential for learning in every school. These spaces allow for flexibility, future growth, collaboration, and often play a role in school pride or become the “heart of the school”. This exercise helped the committee generate ideas about what Winifred wants to see in their school and also helped influence key project goals.



## classroom spaces.

### DESIGN GOALS

- Daylight
- Furniture
- Technology
- Display & Presentation
- Flexibility
- Collaboration
- Grade Alignment and Adjacency



## commons.

### DESIGN GOALS

- Image & Identity
- Flexibility
- Performance
- Socialization
- Community Use
- “Heart of the School”



## space between spaces.

### DESIGN GOALS

- Image & Identity
- Socialization
- Active & Passive Supervision
- Daylight
- Technology



## library media.

### DESIGN GOALS

- Variety of Activities
- Display & Presentation
- Flexibility
- Daylight
- Furniture
- Technology







## educational environment.

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### Nurturing Educational Ambitions

The vision and goal of the Winifred K12 School is to provide a cutting-edge facility that supports a variety of teaching modalities while reflecting Winifred's agrarian roots and respect for land, history, and community. The new school includes spaces that invoke creativity and provide flexibility, featuring specialty instructional spaces dedicated to the advancement of agriculture and horticulture, while manufacturing areas and community-use spaces serve as valuable amenities for local businesses as well as students. Sparking meaningful, practical, and multi-generational connections between the school and the broader community, these technological and elective-related instructional spaces enhance educational enrichment.





## educational environment.

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### Supporting Diverse Learning Styles

The environment supports various learning and teaching styles through flexible spaces, enabling teachers to adapt to different instructional needs, promoting dynamic and interactive learning experiences. A dedicated area serves special education students, providing specialized spaces that did not exist in the previous school facilities, ensuring that all students receive the support they need in a nurturing and safe environment.

### Advanced Science and Vocational Education

The science labs are fully equipped with lab-grade countertops, casework, and equipment, providing collegiate-level science education. Agriculture and science classrooms have direct access to a shared utility room leading to a greenhouse and an environmentally controlled vertical garden, offering facilities for hands-on learning. These spaces provide students with advanced tools and flexible areas for hands-on learning, preparing them for future careers.

### Adaptability for the Future

The new gym is equipped with retractable bleachers, a dividing curtain, motorized clerestory roller shades, and A/V equipment, making it suitable for a wide variety of activities including sporting events, performances, and community gatherings.

The redesigned library, with a small curtained performance stage, A/V equipment, and integrated spectator seating tiers, can host student performances while functioning as a library throughout the school year.

Overhead sectional doors in the shop and assembly spaces in the STEAM areas allow activities to extend into exterior paved areas for additional space as needed. The central commons space remains open to facilitate various uses, meeting evolving educational and community needs.





## results.

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### Achieving Educational Excellence

The expansion added 12 instructional spaces, including specialized classrooms for music, athletics, weight training, ag science, special education, and STEAM. These new and renovated spaces provide a well-rounded educational experience, equipped with modern technology and resources for 21st-century learning.

### Meeting Community Goals

The project more than doubled the existing instructional spaces, addressing the need for diverse educational environments. Brand-new facilities for sports and community events, including the new gym, indoor and outdoor tracks, turf field, and bleacher structures, solidify the school's role as a valuable regional amenity.

“

Completion of this work provides a more comfortable and cohesive school environment that supports student learning rooted in the greater community values.

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## results.

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### Financial Stewardship

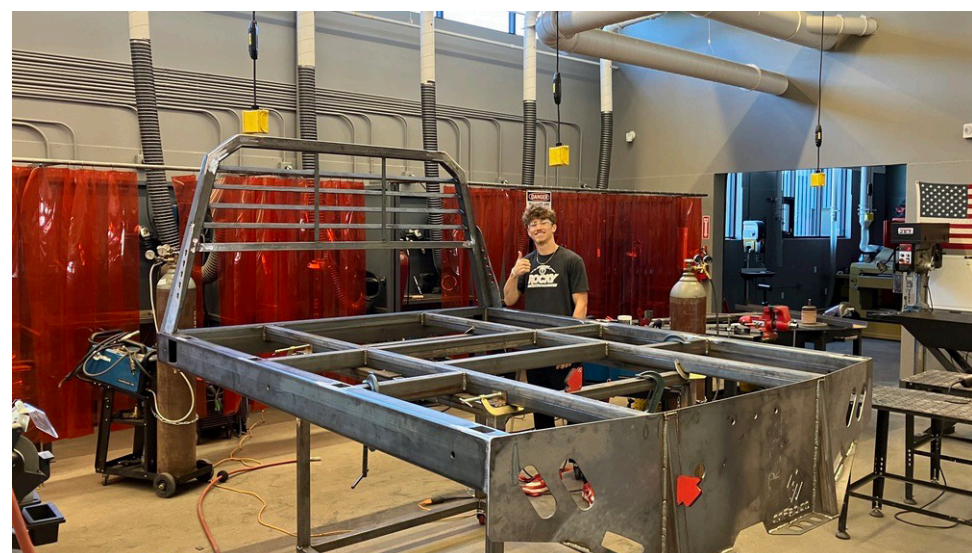
The project incorporated low-energy mechanical, plumbing, and electrical systems, ensuring decades of low operational costs. The renovation preserved the existing school structure, saving costs on demolition and new construction. Local trade workers and craftsmen were utilized, channeling the investment directly to community-based business owners. Local businesses saw increased income throughout the construction period, benefiting the broader community. Additionally, an endowment was created to fund future maintenance, alleviating financial burdens on the community and ensuring the long-term sustainability of the school.

The greenhouse and vertical garden not only provided students with learning opportunities but the rewarding experience of contributing to the community as food suppliers. Students have created a business plan to sell produce locally, supplying the school kitchen and local grocery stores. This initiative elevates practical learning experiences while generating additional financial resources for the curriculum.

The well-equipped vocational shop also allows students to produce marketable goods, such as wooden canoes and truck beds, fostering entrepreneurial skills and generating income that supports the school's programs.

### Sustainability and Wellness

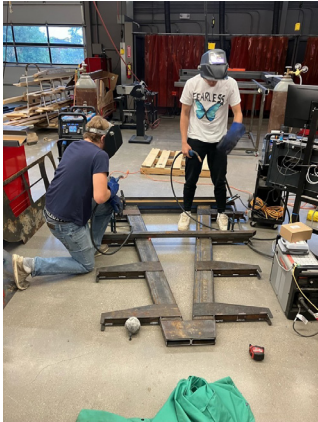
The building exceeds code minimums with high-R spray foam insulation, passive daylighting, a geothermal well field, and solar walls. These features reduce energy consumption and operational costs, promoting environmental sustainability. Community-use spaces, natural daylight, and athletic amenities promote wellness and engagement. The greenhouse and vertical garden provide hands-on educational opportunities, enhancing the learning experience and fostering a connection to the environment all while supplementing the availability of fresh, organic produce.





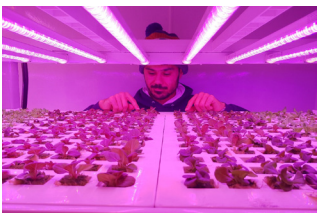
## results.

### Values-Aligned Design



## learners first.

The Winifred K12 School project places students at the heart of its design, with flexible and innovative learning spaces tailored to support all learners through varied teaching styles and educational programs. Advanced vocational and technical curricula prepare students for higher education and impactful careers. These forward-thinking solutions create a vibrant and inclusive environment, fostering educational excellence and community pride.



## equitable design for all.

Diverse voices were heard and prioritized in every stage of concept and execution. Inclusive spaces like special education classrooms, vocational shops, multi-use communal areas, and high-tech amenities serve local residents, organizations, and businesses. The process welcomed community contributions in the form of ideas, resources, and values, and fostered a culture of inclusivity from the start, resulting in a cohesive design that serves and benefits all.



## sustainable & future ready.

A moss wall mural, high-tech science labs, and flexible learning environments demonstrate a commitment to environmental sustainability and community-focused design. Advanced mechanical systems, geothermal well fields, and sustainable features like natural daylighting and rainwater harvesting improve energy efficiency and create a vibrant, inclusive environment.



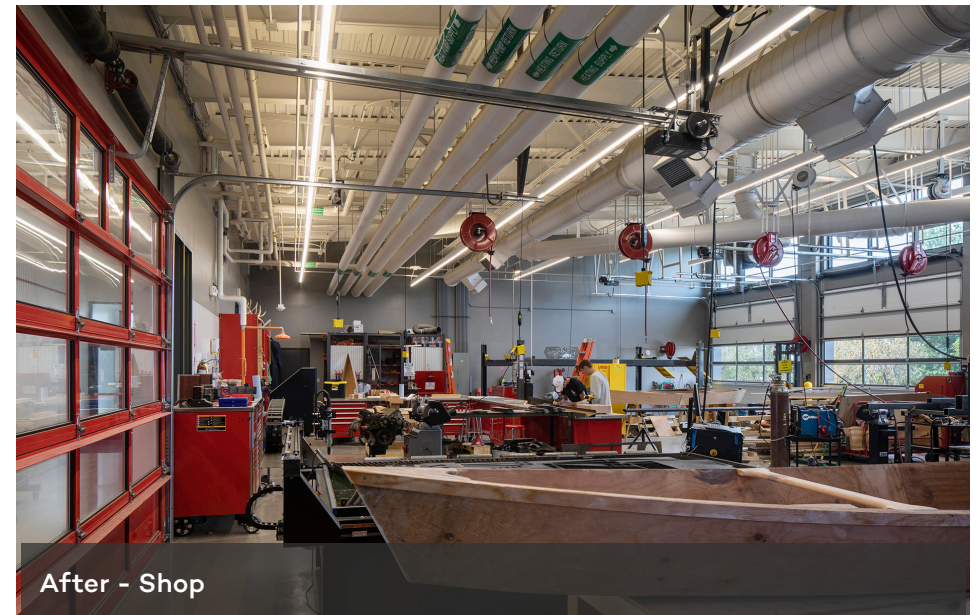
## rooted in place.

Aligning learning with place, this project is wholly intertwined with the community's agrarian roots and land stewardship ethos. The thoughtful renovation, combined with regionally-responsive design elements, achieves a learning environment deeply connected to its context. Features like place-based experiential graphics and locally sourced materials emphasize and celebrate the community's heritage, fostering Winifred's proud identity and bringing tangible purpose and meaning to the educational experience.



# results.

## Before & After - The Transformation





# results.

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## Before & After - The Transformation



Before - Football Field / Track



After - Football Field / Track

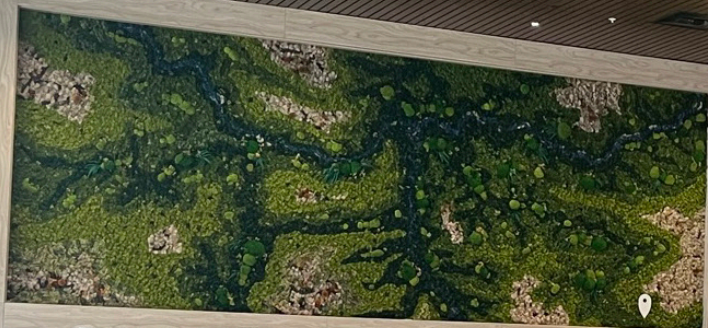


Before - Entrance



After - Entrance





## GATEWAY TO THE BREAKS.

These spaces promote social interaction, community engagement, and provide a central location for community members to participate in various events and activities.