



**JOPLIN SOARING HEIGHTS ELEMENTARY  
SCHOOL + EAST MIDDLE SCHOOL**

**One Building. Two Schools.  
Joplin, Missouri**

2014



## DESIGNING HOPE IN JOPLIN

The story of Joplin is first and foremost a story of its people....**A resilient community.**

On May 22, 2011, Joplin experienced the worst tornado disaster on record to date in the United States. A class F-5 tornado hit the city on a Sunday evening and the community's future changed forever.

Under the leadership of Dr. C.J. Huff and his administration team and school board members, the Operation Rebuild Team grouped together to first make sure their district family was safe and to locate all students and staff. Unfortunately there was loss of life. Second, they quickly reviewed which schools were destroyed and/or damaged to determine how they would get their students back in school. The district, the community, the state and the country embraced the resolve of this small Midwestern town that made a bold statement that school would open as soon as possible and the Joplin School District would be a model school district for not only the recovery process, but it would model a new paradigm shift on how education was delivered to

its students.

This plan had been in place and the district administration had already been putting into place the very steps necessary to move deep into the 21st century education so the district was ready to embrace the necessary tools to lead our students into the future.

Prior to the tornado, Dr. C.J. Huff and his forward-thinking leadership were already on track to make several improvements to the school district. Before the tornado the district was planning to build two elementary schools. Little did he know that because of this tornado, the largest employer organization (his) in Joplin, would have almost all of its facilities disappear. Thankfully, because of his thoughtful approach to education and planning he and the entire team were now able to make dreams come to life in a bigger, more profound way. You see, Dr. Huff and his team had the district's sights on changing how education could be delivered. The result of this project design echoes this desire and gives teachers new and better platforms to enhance teaching learning.

# EXECUTIVE SUMMARY

Words seem to always come up short when we tell the story of Joplin and of the way this project came to life. While we were a part of the effort to restore the community, we feel like it was mostly our team that benefited the most. How many times in our careers do we get the chance to see the transformation of lives, a city, a group of people, building infrastructure and commerce be re-birthed? This is what our team was fortunate enough to experience.

It's difficult to summarize this project without stating the obvious: the challenges. And, it had several big ones. One of the biggest challenges was how to keep the Joplin Community intact. We needed to support the community by helping get the education system back up in order to keep residents from moving away. Because of this, our schedule mandated a quick response. We made sure not to miss a step in our normal master planning, community engagement and design process and yet it had to happen with a rapid management schedule.

The result of all discussions and planning was the idea of creating a brain-based new generation learning facility that would house both elementary and middle school students: One Building. Two Schools.

The process and the rationale for this design and ideation is described in detail on the following pages, however, we want everyone to understand that the design of this project was a collaborative effort with the entire team in Joplin. We could not have done this without them and we are a better team because we had the opportunity to see what resiliency, transformation and hope really looks like in tangible form. We were the fortunate team that got to participate in **designing Hope in Joplin.**

### COSTLIEST TORNADO IN HISTORY

**\$2.8 BILLION IN DAMAGES**

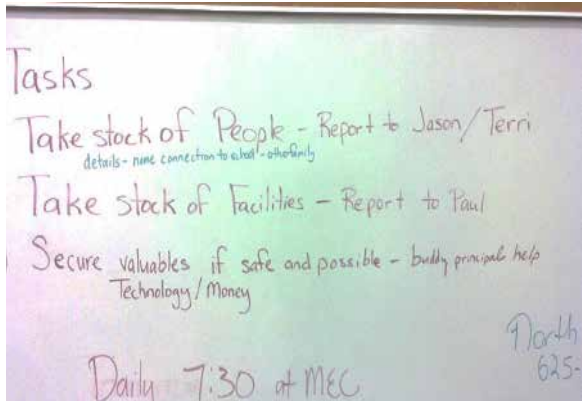
- 8,000 homes damaged or destroyed
- 400 businesses damaged or destroyed
- 18,000 vehicles damaged or destroyed
- 161 community members perished

**JOPLIN SCHOOL DISTRICT DAMAGE ASSESSMENT**

- 9 Schools damaged or destroyed
- Impacted 4,200 Students (54% of Student Body)

**JOPLIN SCHOOLS ADMINISTRATION BUILDING HEAVILY DAMAGED**

- 3,000 students lived in the storm's path
- Lost 8 members of the school family:
- 1 team member and 7 students



First Leadership Team Meeting May 23rd





## ONE BUILDING. TWO SCHOOLS.

Soaring Heights Elementary and East Middle School facility opened 19 months after the tornado disaster.

### SOARING HEIGHTS ELEMENTARY SCHOOL WING

The new Joplin Elementary School is designed to house more than 450 elementary students grades Kindergarten through five in this rebuilding school district. We designed the new elementary school on a 36-acres site. Significant effort and time was spent soliciting input from school district patrons through a series of community forums/work sessions. The result is a design that embraces the school district vision and goals for elementary school education. **21<sup>ST</sup> Century Learning Concepts:** A collaborative approach resulted in character statements that represent the district's most critical concepts for design and relate to overall district vision. The Learning Park<sup>SM</sup> is a collaborative learning environment that includes activity areas with presentation and wet areas, small group alcoves, resource room, and conference rooms. The Learning Park area has glass to the classrooms allowing learning activities to be observed, displayed and each neighborhood to be opened promoting community among neighborhoods.

### EAST MIDDLE SCHOOL WING

The new Joplin East Middle School is designed to house more than 750 middle school students grades six - eight in this rebuilding school district. We designed the new middle school on a 36-acres site. Significant effort and time was spent soliciting input from school district patrons through a series of community forums/work sessions. The result is a design that embraces the school district vision and goals for middle school education. **21<sup>ST</sup> Century Learning Concepts:** We created collaborative learning environments. The academic team houses have a variety of three spaces to learn. First, small conference areas for small team learning was created which is adjacent to medium size group learning areas. Finally, large team areas were created as a focus area within the academic team area. In all, the designs are reinforced through the programming and our team's proprietary design planning process called Character Statements<sup>SM</sup> as well as current educational learning modalities.

ONE BUILDING. TWO SCHOOLS.



## DATA SHEET / KEY STATS:

<b>Project Name:</b>	Soaring Heights Elementary + East Middle Schools
<b>Project City/State:</b>	Joplin, MO
<b>School Category:</b>	Joined Elementary and Middle School Building
<b>Grades Served:</b>	K-5 and 6-8
<b>Capacity:</b>	Elementary side: 450; Middle School side: 750 sq. ft.
<b>Gross Area of Building:</b>	Elementary side: 65,290 sq. ft.; Middle school side: 157,273 sq. ft.
<b>Occupancy date:</b>	January 2014
<b>Site Size:</b>	34.85 total acres
<b>Building Sq. Footage:</b>	222,563 sq. ft.
<b>Sq. Ft. Cost per Student:</b>	\$197
<b>Cost of Construction:</b>	\$40,180,046
<b>Total Project Cost:</b>	\$43,950,421
<b>Contract Date:</b>	August 22, 2011
<b>Date Completed:</b>	January 2014

Out of clutter, find simplicity. From discord, find harmony in the middle of difficulty lies **OPPORTUNITY**.  
– Albert Einstein





# COMMUNITY ENGAGEMENT MASTER PLAN PROCESS



## OPERATION REBUILD.

Operation Rebuild was both a name of a team and a name of the complete effort. We all had to be in unison.

Envision the very first meeting of a community and a team that had just experienced a disaster of this magnitude. What would be going through their heads and yours? How could we deal with the task at hand all the while knowing that these same people were dealing with loss of loved one(s), automobiles, homes, jobs and all belongings? This would be the same team of people who would become our touchstone to knowing exactly what their community and school system needed. This resilient cross-section of the community would give us a much-needed perspective and helped us envision the future. Together we informed one another and helped the entire team see what a new model of educational delivery could look like and what it could mean for their students. Designing hope for Joplin was about honoring everyone involved...honoring their stories, their hopes and dreams as well as their tragedies. And, the result? Because we crafted our journey and this project together and allowed everyone's voice to be heard, everyone owns the design decisions. We couldn't have asked for more.

**“School starts in 84 days. Let’s get to work! Operation Rebuild has begun!”**

– Dr. C.J. Huff, Superintendent



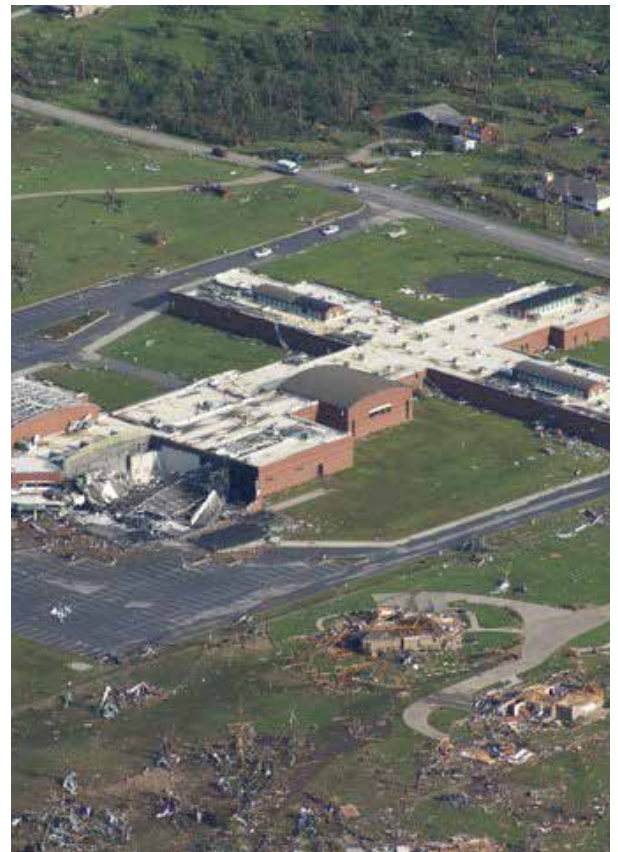
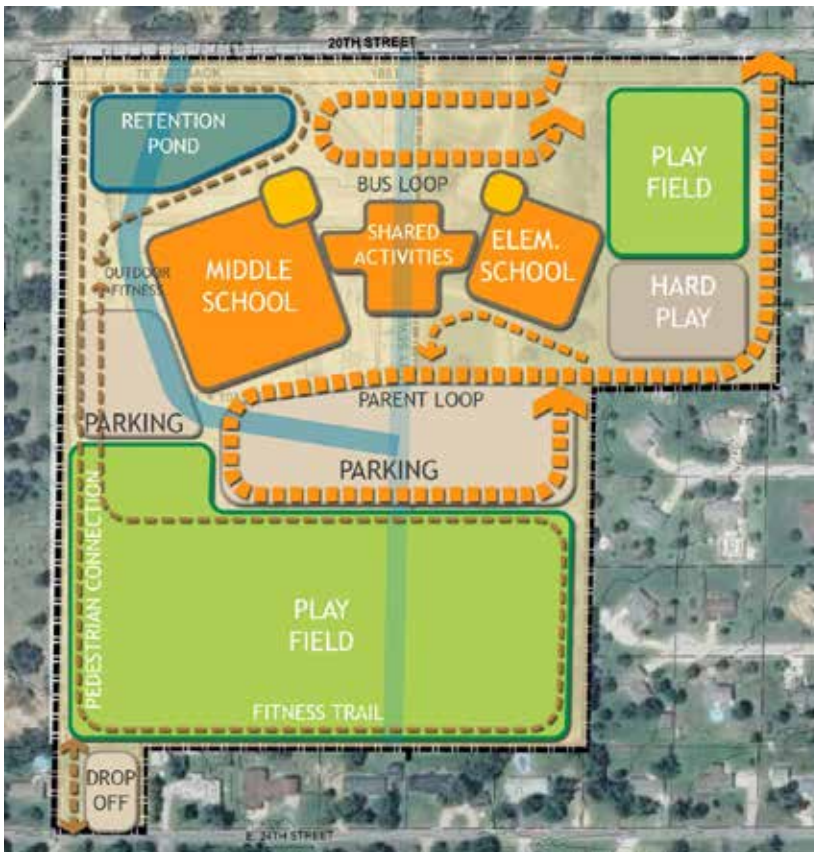
## COMMUNITY ENGAGEMENT PROCESS

The community engagement process for the project began immediately after Dr. Huff said, “Go!” These efforts laid the ground work for a successful design process. We were mindful to include multiple students, teachers, administrative team members, community members, board members and anyone else we felt would help us dream and create a unique vision for Joplin. We included the administration, teachers, principals and board members in our process. We were a part of regular monthly meetings as well as special community forums to help keep everyone on the same page and seek input and direction from key groups. We presented information at various stages to the school board. We also had special meetings for the community: we held several special meetings with the community in order to cull the community’s ideas, needs, hopes and wants. A part of our design process included groups of children to help select colors and materials that best fit their educational needs. We also let two students who were going to start out in one of the schools and by the end of the project’s close they were going to be in the other school.

## WORK SESSIONS

We formed a committee and named it Operation Rebuild – a team of a cross-section of key people representing the key constituents in the Joplin Community and Joplin School District. This important team of people met frequently and sometimes more than once daily in order to steward this entire effort. We wanted a passionate team who would have one another’s backs and help give ownership to every group that our effort was to impact. We wanted a team that would help everyone keep the promise of HOPE the touch point for every decision concerning the new elementary and middle school facility. Our goal was to make sure all key stakeholders and constituents’ voice was at the table: Students, community members, administration, faculty, school board members, consultants, contractors and sub contractors.





## SITE DECISIONS + CONCEPTS

**THE SPACES ARE JOINED PROVIDING A BENEFIT TO THE STUDENTS AND COMMUNITY.**

Once the overall character statement goals were established, we looked at the site and helped the district see the value in actually building one building that would house two schools. We then looked at the layout of how these two purposes would interact with one another to support one another. We found that there would be **shared space and shared activities and this area helped us create efficiencies** and eliminate what would otherwise be duplicative.

- A direct opportunity for mentoring and a direct way to live it out.
- Reinforced new educational delivery concepts and direction of the district.
- Connect middle school with elementary school and create innovative education opportunities.
- We were intentional to help connect back to the community and the design of the site helps protect the integrity of the overall neighborhood. The school district wanted to have a presence on 20th Street.
- Cost savings by reduction of duplicate core services.
- Purchased land to add elementary to create a campus.
- Joining buildings enhanced mentoring opportunities.

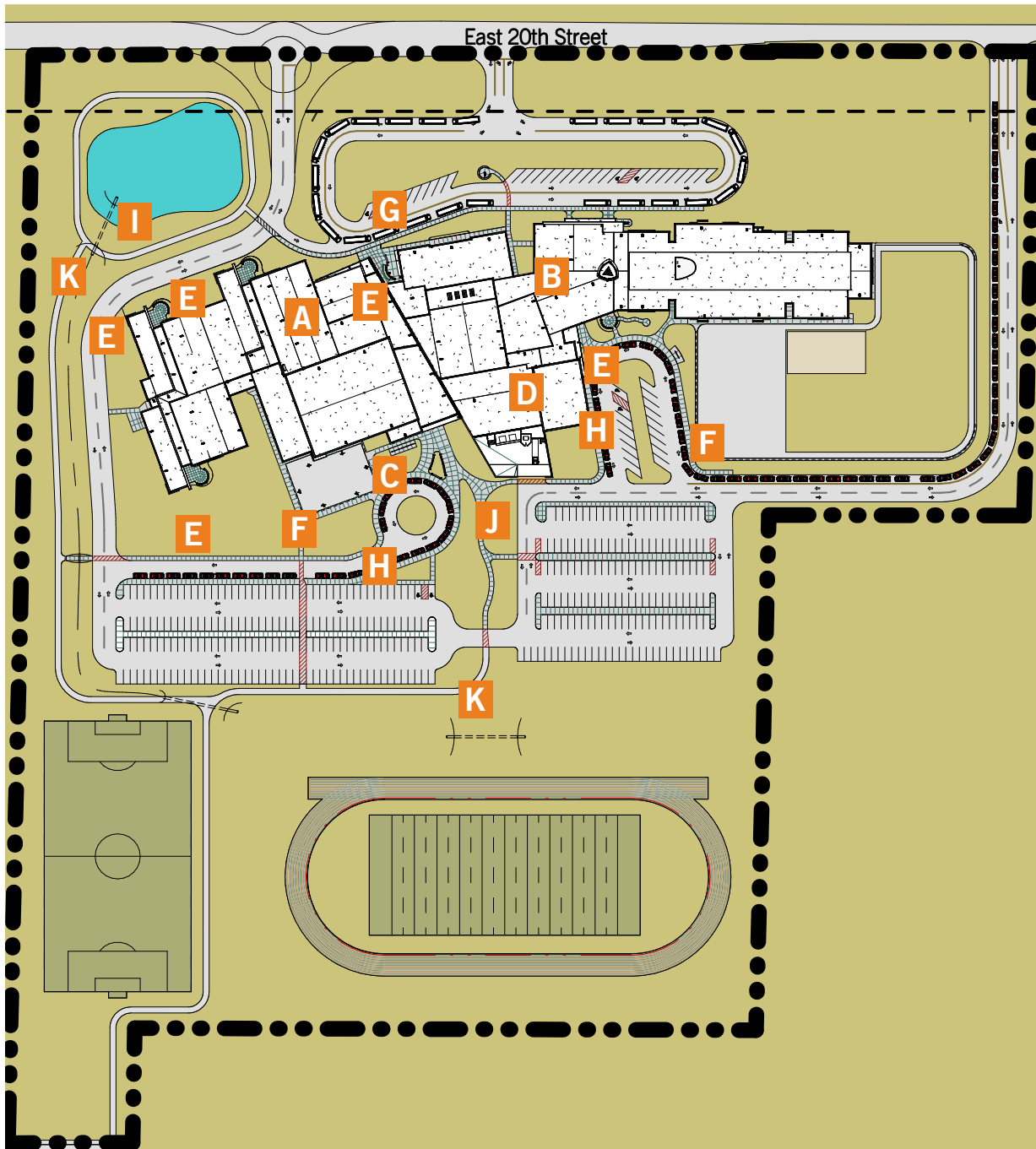




## EDUCATIONAL / PHYSICAL ENVIRONMENT

Shifting Education Delivery every space layered on an extra educational layer over a simple functional layer





- A** MS main entry
- B** ES main entry
- C** MS secondary entry
- D** ES secondary entry
- E** Outdoor learning
- F** Outdoor play
- G** Bus drop-off
- H** Parent drop-off
- I** Outdoor learning lab/retention pond
- J** Receiving
- K** Walking trail

- MS traffic was intentionally kept separate which helped reduced overall traffic.
- Outdoor play was also kept separate for the two student groups.
- We had to replant all the trees and landscaping that were lost in the storm.

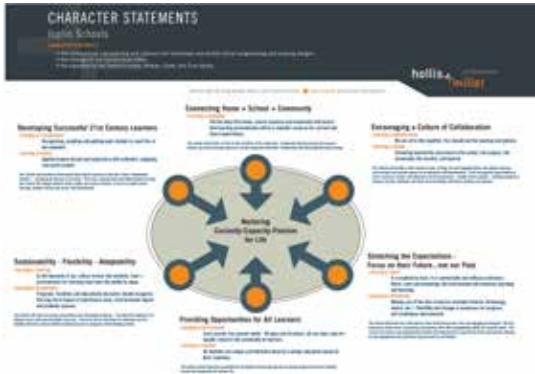


## HOW PLANNING AND EDUCATIONAL VISION IS EVIDENT

We helped define **Joplin's desires and dreams which ultimately became their vision.** We did this first using words to help the stakeholders and community members look at traditional ways of delivering education and we also used a variety of images to help them see the potential and possibility for a new paradigm of learning environment. In the elementary we helped eliminate all corridors and we integrated multiple scale spaces to create a background with zero boundaries for learning modalities. In the middle school wing we created living rooms, the learning stair and commons areas that were multi-purposeful.

## SUPPORTING ALL LEARNING ENVIRONMENTS

We eliminated all corridors and integrated multiple learning spaces which **created the background for unlimited learning modalities.** The Learning Park<sup>SM</sup> creates an indoor/outdoor space for students and teachers to collaborate and interact.



**JOPLIN COMMUNITY'S STUDENT POPULATION DEMOGRAPHICS BASED ON 2013 FIGURES:**

Total:	875,000
Asian	16,550
Black	145,550
Hispanic	44,800
Indian	3,940
White	648,000

**CHARACTER STATEMENT**

**DEVELOPING SUCCESSFUL 21ST CENTURY LEARNERS**

**Learning is Personalized:** Recognizing, enabling and guiding each student to reach his or her potential.

**Learning is Active:** Applied project-based and exploratory with authentic, engaging real world context

# PLANNING + CHARACTER STATEMENTS

Our proprietary planning process starts first with words...facilitating dialogue that defines the big picture vision of the project and what every space inside the project should reflect. We call it Character Statements<sup>SM</sup>. The core character statements and vision for this project included six core statements. The purpose in doing this first before having discussions about the site or before designing one space is to make sure the entire effort has a single voice. What this meant to the team and how it would be look in the space is also detailed and shows the thoughtfulness of team members to understand the key objectives each statement was endeavoring

## DEVELOPING SUCCESSFUL 21ST CENTURY LEARNERS

**Learning is Personalized:** Recognizing, enabling and guiding each student to reach his or her potential.

**Learning is Active:** Applied project-based and exploratory with authentic, engaging real world context. The schools will provide an environment that inspires learners to become critical, independent thinkers -- stretching all learners at all levels. Thru trust, empowerment and differentiated learning the schools will engage students minds, bodies and sense of wonder to excel in project-based learning, problem solving and career skill development.

## CONNECTING HOME + SCHOOL + COMMUNITY

**Learning is Engaging :** Partnerships thru home, school, business and community will ensure that learning environments will be a valuable resource for current and future generations. The schools will provide a home for the activities of the community. Community learning and parent resource centers (as well as storage spaces for various programs) will foster relationships and encourage life long learning.

## ENCOURAGING A CULTURE OF COLLABORATION

**Learning is Collaborative:** We are all in this together. You should see the learning everywhere.

**Learning is Global:** Extending beyond the classroom to the school, the campus, the community, the country, and beyond. The schools will include a wide variety of open, inviting, fun and engaging indoor and outdoor learning environments and provide spaces for professional staff development. It will leverage the opportunities to share resources, mentor and integrate a shared elementary + middle school campus -- allowing students to progress by their readiness and share their knowledge with fellow students and teachers.

## STRETCHING THE EXPECTATIONS - FOCUS ON THEIR FUTURE...NOT OUR PAST

**Learning is Joyful:** It is enabled by trust. It is comfortable and without pretension. Warm, safe and welcoming, the environment will maximize teaching and learning.

**Learning is Stimulating:** Making use of the best resources available (human, technology, nature, etc.) Flexibility and change is necessary for progress and continuous improvement. The schools will break out of the typical school mold and provide a fun and engaging environment. The first impression will be warm, welcoming and inspiring, while still accomplishing safety and security needs. The current and future's best educational practices will determine the organization of the environment allowing for full engagement and continuous improvement by all students.

## PROVIDING OPPORTUNITIES FOR ALL LEARNERS

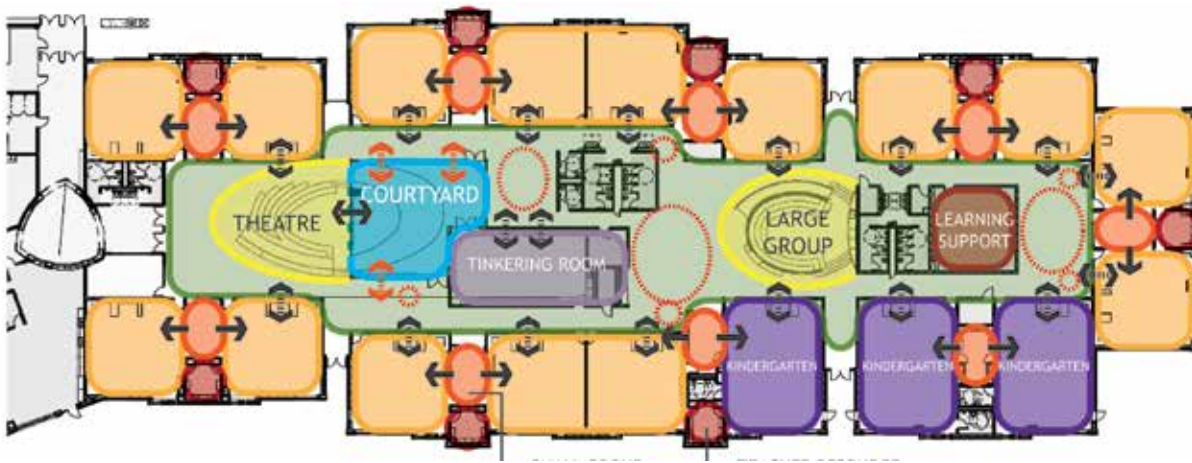
**Learning is for Everyone:** Every learner has special needs. All ages and all places, all can learn and are equally valued in the community of learners.

**Learning is Flexible:** All students are unique and therefore deserve a unique education based on their readiness. The schools will be naturally accessible for all students and provide spaces for special programs that are centrally located and integrated into student life.

## SUSTAINABILITY - FLEXIBILITY - ADAPTABILITY

**Learning is Evolving:** As the demands of our culture evolve, the methods, tools + environments for learning must have the ability to adapt.

**Learning is Accountable:** Programs, facilities and educational decisions should recognize the long-term impact of operational costs, environmental impact and students success. The schools will focus on energy conservation and sustainable practices -- teaching the students to be globally aware and environmentally conscious. The focus will be maintained on education and the building will have a natural ability to adapt and grow as programs and technology

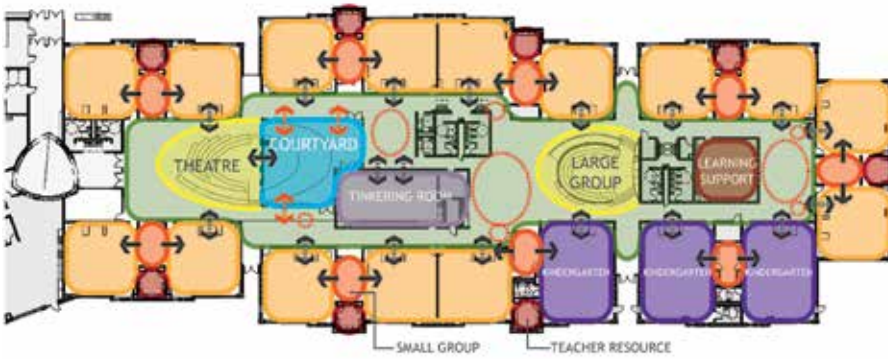


The design of Soaring Heights and East Middle school were created allowing for mass customized learning. A few of the learning modalities and examples of specific spaces you'll see throughout the building include:

- Independent study (caves, neighborhood collaboration)
- Peer tutoring (caves, tree house -- the conjoined school fosters a culture of mentoring.)
- Small group collaboration (2-6) (caves, genius bar, neighborhood collaboration)
- One-on-one teacher + student (classroom breakout, neighborhood collaboration)
- Lecture format (theatre in the park, auditorium, classrooms, learning stair)
- Project-based (tinkering room, caves, courtyard and pond are outdoor learning labs)
- Technology-based (genius bar, media center, caves -- this is a technology-rich environment throughout the building)
- Distance learning (auditorium utilized by both the elementary and middle school student groups)
- Independent study (caves, learning stair and neighborhood seating)
- Student presentations (theatre in the park, auditorium, learning park, tree house)
- Performance + music-based (auditorium, music room, learning stair, elementary school commons, Outdoor middle school drama stage)
- Seminar style instruction (classrooms, auditorium)
- Naturalist learning (courtyard, outdoor learning)
- Social + emotional learning (group areas, neighborhoods, learning stair)
- Art-based learning (art on display in entrance, courtyard, outdoor middle school drama stage)
- Storytelling (classroom and neighborhood floor seating, tree house, theatre in the park)
- Hands-on learning (tinkering, courtyard, outdoor learning and courtyard and pond are outdoor learning labs)

**“Seeing the looks on the faces of the parents and the kids when they come in makes this all worthwhile.”**

- TERESA ADAMS, SOARING HEIGHTS PRINCIPAL



## ADVANCING DEVELOPMENT

The spaces were designed with brain-based educational philosophies. All spaces are age-appropriate and include furniture and fixtures that are designed to reinforce and enhance the specific age's learning needs, styles and activities.

## BUILDING DESIGN ENHANCES MENTORING AND STUDENT TRANSITION

Initially the administration wanted the two schools to be on separate sites. Our team helped the district see the potential for greater and enhanced mentoring if the two were built together on the same site. This design also provided cost efficiencies as well as enhanced student education transition from elementary into middle school – a transition that can often be difficult for students.

Planning allowed Joplin to define its desires and dreams – dreams which ultimately became its vision. As a part of our dreaming effort, we coordinated strategic site tours at a number of innovative buildings (educational and corporate) including: Google HQ, Apple HQ, Dell HQ, and numerous schools around the country. The first step of our visioning and planning process after the tours focused on strategic words to help the stakeholders and community members look at traditional ways of delivering education. We also used a variety of images to help see the potential and possibility for a new paradigm of

learning. Research continues on the brain of every age group and how human beings gather together for social as well as learning opportunities. So, it is imperative that as designers we research and keep up with these ideas and data-based educational philosophies in order to develop designs driven by current thinking and long-time proven methods for learning. We must design environments that nurture and promote collaboration with the integration of technology as part of every space for the students from Pre-K to high school continuing into the collegiate system.

It is critical that students become citizen-ready, college-ready and career-ready in order to be successful in the 21st century society. A well designed facility will be able to promote and foster the concepts of interdisciplinary collaboration, teaming and technology integration. These concepts allow students to learn how to critically think in order to be ready for any situation that they may encounter in their future. Our young students need to be able to adapt in the global economy and be able compete on every level and in any venue that may be presented before them. With this in mind, the spaces meet the following educational standards:

- Create spaces for life-long learners.
- Design developmentally-appropriate learning spaces.
- Facilitate a safe and secure environment.
- Focus on nurturing the whole child.
- Provide a stable and structured base environment and be a pillar to the community.



**SOARING HEIGHTS  
ELEMENTARY SCHOOL**





“Above and beyond fantastic design work, the thing that impressed me the most about the design team was their commitment to the mission. They weren’t just there to build a building. They were there to enhance the educational opportunities we could offer our children.”

- DR. C.J. HUFF, SUPERINTENDENT, JOPLIN SCHOOLS



## LIGHT HOUSE

The future of Joplin lies in the hands of students who will be the designers of whatever the community is to become. **The students are the architects of the future.** Daily, each student passes through this space on their way to classrooms, media center, gym, commons areas and the art room where their art is on display. The lighthouse was designed with Joplin's students in mind... it was designed to beckon them to **create, find hope and dream...to dream very big.**





## LEARNING PARK<sup>SM</sup>

Designed to nurture learning, our Learning Park<sup>SM</sup> was created to **instill dreaming and possibility in the minds of the teachers and students** and has both indoor and outdoor areas so the opportunities for learning are endless. It is the overall central area to the school. It is encased in classrooms. Like a real park set in nature, there are a variety of learning ecosystems to facilitate learning for every type of brain. Learning takes place in a light and color-filled space that engages the mind and body. Operable walls and adjacencies provide the flexibility needed to encourage new ways of thinking, sharing, teaching and absorbing.

### CHARACTER STATEMENT



#### **CONNECTING HOME + SCHOOL + COMMUNITY**

**Learning is Engaging:** Partnerships thru home, school, business and community will ensure that learning environments will be a valuable resource for current and future generations.



## THEATRE IN THE PARK

This unique space was designed to fit within the context of Learning Park. The learning modalities expressed in the spaces are intentional and include a variety, including: peer tutoring, student presentations, storytelling and project-based. With Theatre in the Park, its intended uses are as open as the sky. For some students and teachers it could be a round robin sharing or debates or brainstorming ideas for a science experiment. The students get to have the platform just as much as the instructors. And, we believe that sets them up for a new way to learn from each other.

### CHARACTER STATEMENT

#### ENCOURAGING A CULTURE OF COLLABORATION

**Learning is Collaborative:** We are all in this together. You should see the learning everywhere.

**Learning is Global:** Extending beyond the classroom to the school, the campus, the community, the country, and beyond.





## TREE HOUSE

The human spirit was designed to soar and this is exactly what our design team hoped for this space. Interactions and collaboration – both planned and unplanned – are required to **encourage sharing, ideation and push the imaginations as far as they can fly.** A variety of spaces, shapes, color and gathering spaces help make this happen.



### CHARACTER STATEMENT

#### ● **STRETCHING THE EXPECTATIONS - FOCUS ON THEIR FUTURE...NOT OUR PAST**

**Learning is Joyful:** It is enabled by trust. It is comfortable and without pretension. Warm, safe and welcoming, the environment will maximize teaching and learning.

**Learning is Stimulating:** Making use of the best resources available (human, technology, nature, etc.) Flexibility and change is necessary for progress and continuous improvement.



## COLLABORATIVE SPACES

Collaborative spaces are incorporated throughout the entire building in a variety of learning settings -- large, medium, small and one-on-one. Most all classrooms open to the Learning Park<sup>SM</sup> and have a shared small group learning space for more private personal interaction with teachers or peers that are private as well as public.



ONE BUILDING. TWO SCHOOLS.

### CHARACTER STATEMENT

#### ● PROVIDING OPPORTUNITIES FOR ALL LEARNERS

**Learning is for Everyone:** Every learner has special needs. All ages and all places, all can learn and are equally valued in the community of learners.

**Learning is Flexible:** All students are unique and therefore deserve a unique education based on their readiness. The schools will be naturally accessible for all students and provide spaces for special programs that are centrally located and integrated into student life.



## FLEXIBLE TEACHING SPACES

All classrooms have a shared small group learning space for more private personal interaction with teachers or peers that are private as well as public and we've enhanced the flexibility with specific furniture choices.



### CHARACTER STATEMENT

#### ● SUSTAINABILITY - FLEXIBILITY - ADAPTABILITY

**Learning is Evolving:** As the demands of our culture evolve, the methods, tools + environments for learning must have the ability to adapt.

**Learning is Accountable:** Programs, facilities and educational decisions should recognize the long-term impact of operational costs, environmental impact and students success.



## MEDIA CENTER + COMMONS

Our spaces here include a genius bar in the media center where students are able to research, test drive books, ideas and we provided open seating and a computer area. This is an active sharing space giving students the freedom to experience and respond. This area is directly adjacent to the commons dining area. It's not a typical space where students are required to be quiet. Instead, it's truly a collaborative area that allows students to learn on their terms. To allow flexibility, an operable glass wall opens to the commons area.

**“I’m over-excited!”**

- SOARING HEIGHTS STUDENT



### CHARACTER STATEMENT ● PROVIDING OPPORTUNITIES FOR ALL LEARNERS

**Learning is for Everyone:** Every learner has special needs. All ages and all places, all can learn and are equally valued in the community of learners.

**Learning is Flexible:** All students are unique and therefore deserve a unique education based on their readiness. The schools will be naturally accessible for all students and provide spaces for special programs that are centrally located and integrated into student life.







# EAST MIDDLE SCHOOL

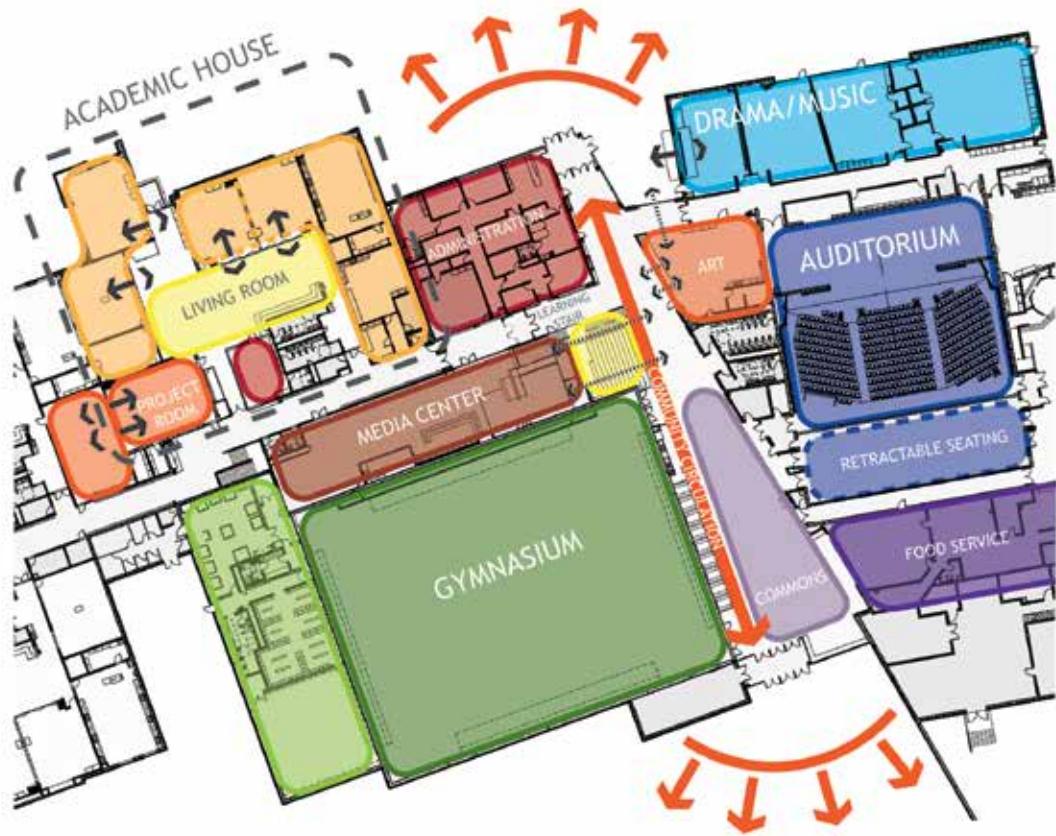




## INTRODUCING STUDENTS TO MIDDLE SCHOOL

The transition from elementary school to middle school can be a tough one for many students. In Joplin, the transition will hopefully be smoother because of the ties between the spaces and due to the collaborative areas where cross-mentoring programs are occurring between the elementary and middle school students. Equally important is the idea that we wanted the natural progression from elementary to upper classmen of middle school age to be viewed as important and the spaces needed to echo this same sentiment. We wanted middle school students to no longer feel as though they were in elementary school. In order to help support this navigation and right of passage, our internal architecture and design concepts for the middle school used a very different color palette -- a vibrant palette that reinforces maturity, boldness, confidence and focus.







## LEARNING STAIR

Creating community gathering areas is an important part of this design. **No one owns any space in the school** so any group of classes or classmates is able to find the space that affords them the best learning or collaborating space possible! For some, it's the Learning Stair. Each morning, we find students **gathering here to talk** about the game last night, activities they want to do together. It's becoming a nesting ground before breaking off to attend class. One of the unique features is our ADA space. We took time and **gave special attention to making the space for those in wheelchairs the prime space** in the Learning Stair area.

## ADA SEATING DESIGN

Best seats in the house are given to students with disabilities in Joplin! Throughout the whole building, we tried to make all ADA areas a prime spot -- the cool spot to be and the route in getting there is just as fun. For instance, in this learning stair area, the windows above open giving the students with disabilities the best seats in the house or like a stadium suite! We wanted students with disabilities to feel important in the school -- not treated as an after-thought.



### CHARACTER STATEMENT

#### ● PROVIDING OPPORTUNITIES FOR ALL LEARNERS

**Learning is for Everyone:** Every learner has special needs. All ages and all places, all can learn and are equally valued in the community of learners.

**Learning is Flexible:** All students are unique and therefore deserve a unique education based on their readiness.

The schools will be naturally accessible for all students and provide spaces for special programs that are centrally located and integrated into student life.



## COMMONS AREA

The unique story in this space is the variety of sizes of group gathering areas that are afforded...from four to eight and more. Collaboration is the emphasis no matter what the activity is. The larger story of this space has to do with the grouping of spaces, including a feature area that includes bar-height tables with daylight and an outside view.



### CHARACTER STATEMENT



#### ENCOURAGING A CULTURE OF COLLABORATION

**Learning is Collaborative:** We are all in this together. You should see the learning everywhere.

**Learning is Global:** Extending beyond the classroom to the school, the campus, the community, the country, and beyond.



## NEIGHBORHOOD LIVING ROOMS + COLLABORATION SPACES

The space designs incorporate brain-based learning opportunities that are age appropriate. Designed to reinforce and enhance age-related activities and learning styles, each neighborhood uses color and geometric shapes to assist with way-finding. Notice the ability to **open and close the wall of windows** in order to segment group learning or open to allow free-passing through each space. Large white boards have shifted from just brainstorming areas to actual smaller scale teaching areas happening outside of normal class times. Private and public cave spaces are included in supervised collaboration spaces where students practice, rehearse and work together in smaller groups. Glass enclosed professional learning communities promote collaboration.

### CHARACTER STATEMENT

#### ● STRETCHING THE EXPECTATIONS - FOCUS ON THEIR FUTURE...NOT OUR PAST

**Learning is Joyful:** It is enabled by trust. It is comfortable and without pretension. Warm, safe and welcoming, the environment will maximize teaching and learning.

**Learning is Stimulating:** Making use of the best resources available (human, technology, nature, etc.) Flexibility and change is necessary for progress and continuous improvement.





## MEDIA CENTER + GENIUS BAR

Our Genius Bar is supervised by media specialists who bounce around to each student and show them how to access the information they need, help them test drive ideas or possible solutions. Free-thinking and sharing is encouraged.

“This school is awesome. I wish I were a kid again.”

- EAST MIDDLE SCHOOL PARENT



### CHARACTER STATEMENT



#### SUSTAINABILITY - FLEXIBILITY - ADAPTABILITY

**Learning is Evolving:** As the demands of our culture evolve, the methods, tools + environments for learning must have the ability to adapt.

**Learning is Accountable:** Programs, facilities and educational decisions should recognize the long-term impact of operational costs, environmental impact and students success.



## AUDITORIUM

The unique features of this auditorium provide more fiscal responsibility than most auditoriums. We wanted to make the space usable for a variety of purposes – not just one for one size of crowd. The **surprise element is the retractable theatre seating with vertical acting dividing partition (skywall)** that subdivides and creates greater shared educational flexible learning space between elementary and middle schools. We wanted the school district to **use this space for more than just large events** and show once again that the district is a responsible steward of resources.



ONE BUILDING. TWO SCHOOLS.

### CHARACTER STATEMENT

#### ● CONNECTING HOME + SCHOOL + COMMUNITY

**Learning is Engaging** : Partnerships thru home, school, business and community will ensure that learning environments will be a valuable resource for current and future generations.





**GRAPHIC DESIGN ENHANCES AND REINFORCES THE VISION, AND CREATES CURIOSITY**



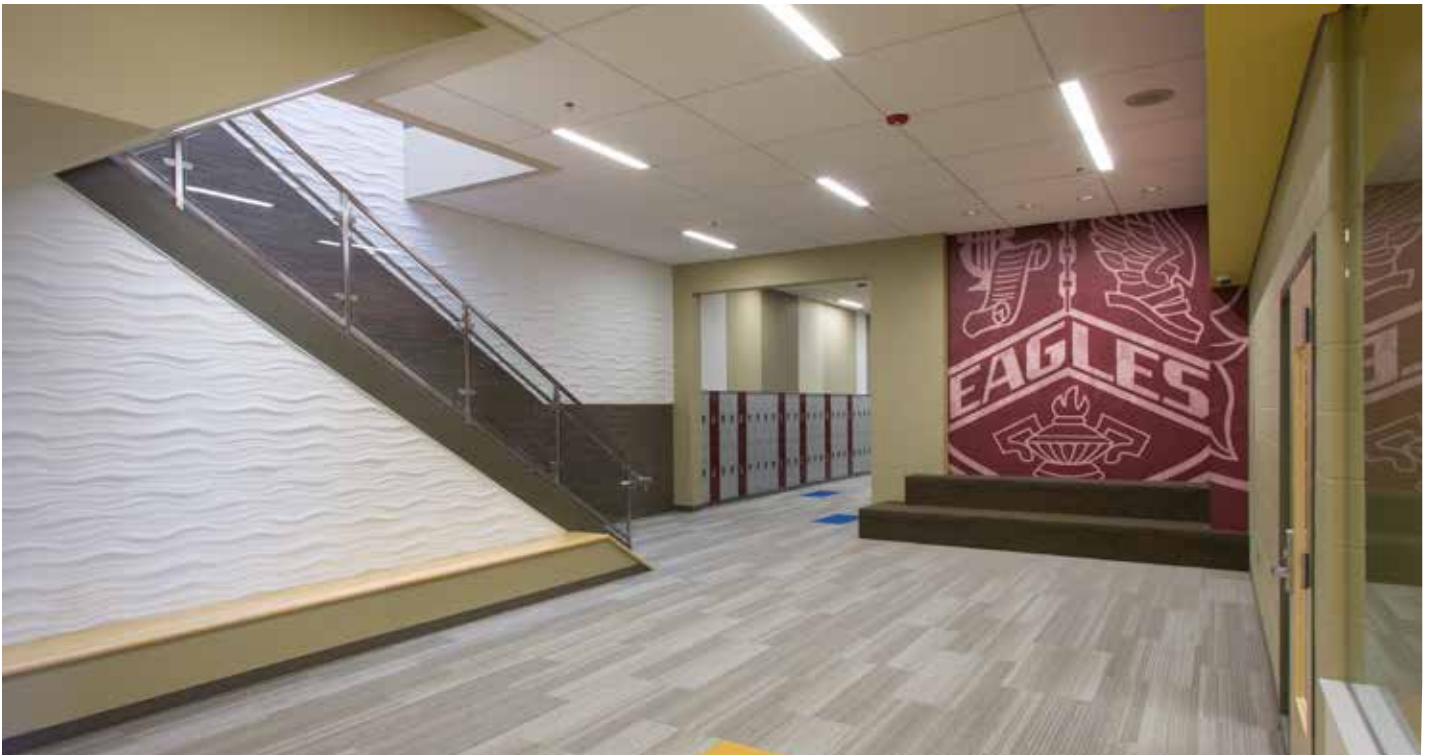


While honoring the past and still pushing forward, we needed to bring in touch points from the past generations without putting the painful trauma of the tornado daily before the eyes of future generations of teachers and students. Instead, we found special spaces and ways to highlight the faces of students -- and keep their hopeful, bright outlook front and center through graphic design.





Thought-provoking learning tools, such as text and graphics were incorporated into the design and placed throughout the new building to reinforce the mission and vision and were used to help enhance the focus on creativity, collaboration and inspire curiosity.

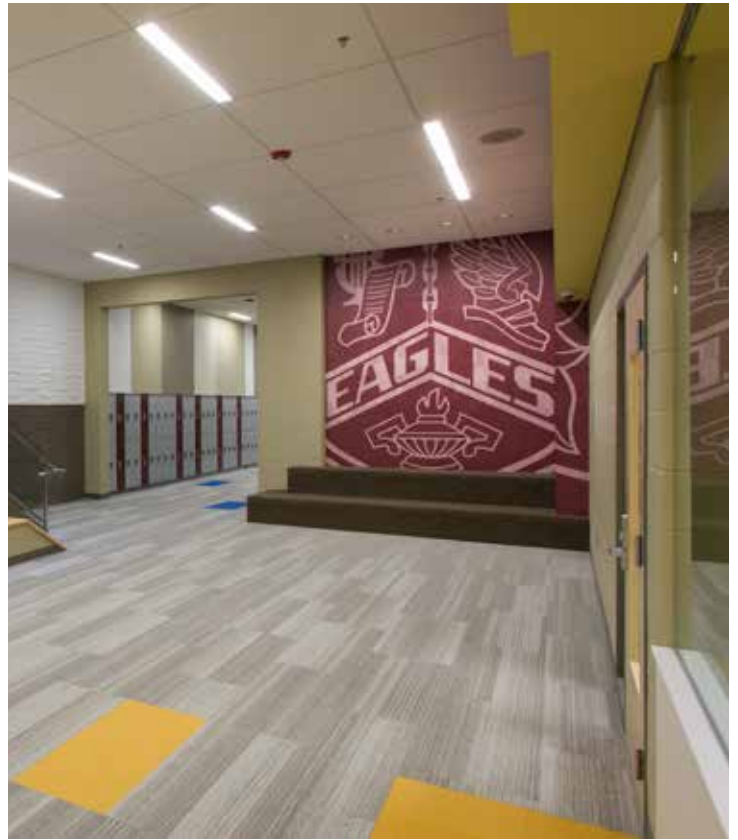


The Joplin community's sense of pride played a large role in a majority of the graphics found in the schools. They are very proud of their eagle mascot, and the symbol of power and loyalty. They wanted the eagle to be represented in the schools in a big way to reinforce the culture and attitude that everyone who attends Joplin schools evokes, "We Are All Eagles!"





The design committee desired a prevalence of the celebration of children and the future they hold. Playful, active children silhouette's are displayed throughout the school. They show school activities such as band, and sports as well as daily activities including skateboarding and bicycle riding.



Wayfinding is important for younger students. In fact it is imperative. We've learned and research tells us that students have a difficult time navigating. For middle school students, one of their biggest fears is getting lost. They have this fear still because they are still developing abstract thinking. So, wayfinding is a key part of helping them feel comfortable in their surrounding so they can focus on learning with all their energies! We incorporated wayfinding in key areas, such as: outside the media center, neighborhood living room areas so they can easily find their classrooms and in key hallways.



## MEETING THE PROGRAM REQUIREMENTS + DELIVERABLES





## BRAIN SPACE EDUCATIONAL PROGRAM

### SOARING HEIGHTS

Neighborhood Learning Environments	33,304 SF
Academic Support	790 SF
Exploratory Commons (music, media, etc.)	11,585 SF
Physical Education	6,181 SF
Administration	1,719 SF
Student Services	809 SF
Building Services	166 SF
Circulation	3,517 SF

### EAST MIDDLE

Academic Houses (classrooms, etc.)	37,830 SF
Physical Education	23,180 SF
Administration	3,440 SF
Elective Programs (computer, business, vo tech)	8,219 SF
Building Services	6,364 SF
Special Programs (gifted and sped)	6,547 SF
Media Center	3,159 SF
Auditorium	9,228 SF
Arts Program	7,197 SF
Food Service	11,097 SF





## CONSTRUCTION TYPE AND MATERIALS

### EAST MIDDLE SECTION

New two-story steel framed construction with metal stud/gypsum board walls. Within the middle school one FEMA safe room is incorporated into the overall building design. The safe room also serves as locker room space, weight room, and auxiliary gymnasium for the middle school students. The space is constructed of cast-in-place concrete walls and roof and is equipped with self-contained restrooms.

### SOARING HEIGHTS SECTION

New 1-Story steel framed construction with metal stud/gypsum board walls. Within the elementary school two FEMA safe rooms are incorporated into the overall building design. One of the safe rooms doubles as classroom space and serves the students and occupants of the elementary school. The other safe room doubles as the elementary school gym and serves the entire community of Duquesne, Missouri. Both safe rooms are constructed of cast-in-place concrete walls and roof and are equipped with self-contained restrooms.

Integrated television systems, wireless facility. What's neat about the construction is that all the materials are fairly common materials but they are used uniquely. The pattern, the finishes of stone/brick -- we designed to help reinforce playfulness. Materials: Face Brick, Manufactured

Stone, pre-glazed concrete masonry units, metal composite panels, stucco, aluminum storefront and curtain wall, modified bitumen roofing system.

### MECHANICAL

4-pipe hydronic central plant system – water cooled chillers, high efficient gas-fired condensing boilers, evaporative cooling towers. Rooftop air handlers – some with energy recovery, demand control ventilation via CO2 sensors in classrooms and densely occupied spaces, DDC BMS control system. Plumbing: High efficient gas fired storage type water heaters. Low-flow plumbing fixtures.

### TECHNOLOGY

AV/Technology integrated into classrooms for 21st century learning. Smartboards, Apple TV, interactive projectors, teacher docking stations

### ELECTRICAL

Energy Efficient lighting, LED exterior site lighting, occupancy sensing w/ relay based controls throughout.

### LANDSCAPE

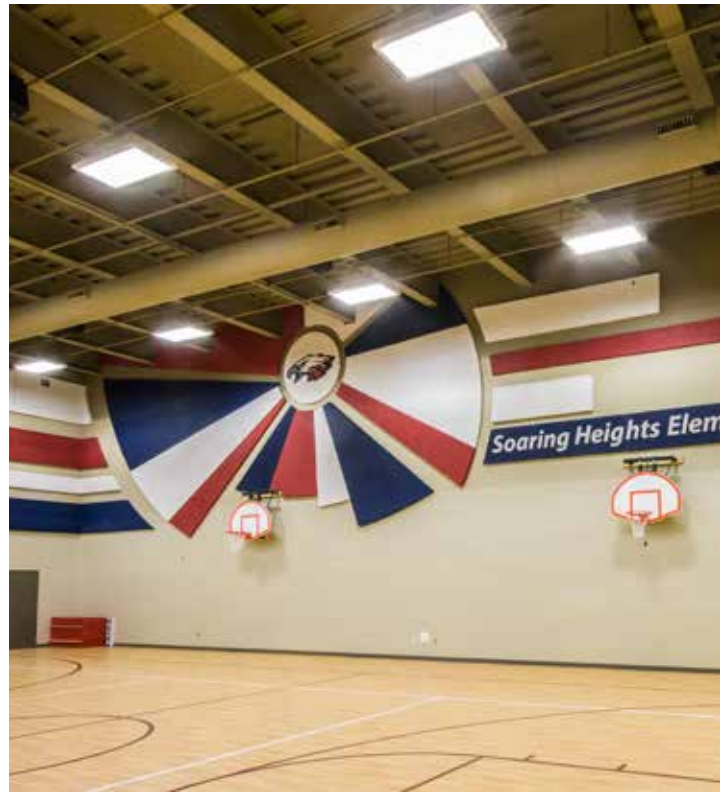
We collaborated with our landscape designer to use onsite wells for irrigation and use plants that were native to the soil in the Joplin area in order to help reduce water requirements, maintenance and cost.



## GREEN/SUSTAINABILITY FEATURES + RATIONALE

The Joplin School District said they didn't want to go after LEED but the district did decide to definitely look at environmental green elements. The Joplin School Administration wanted to be responsible in terms **of making the building as efficient as possible.**

- Daylighting
- Low VOC finishes or ZERO VOC
- No added urea formaldehyde in wood products and in insulation products such as fiberglass
- Efficient HVAC system
- Efficient lighting
- Joint use of facilities
- Preservation of open space due to the efficiency of a joint building
- The use of local/regional and recycled materials
- Efficient water fixtures
- Retention pond used for irrigation
- Native landscaping
- Low-E glass/glazing



## SAFEROOMS / FEMA SHELTERS

We designed three FEMA shelters. Two are for the school building and one is for the community. The safe rooms each have dual purpose as a classroom, gym or weight room so the spaces are being used at all times. Each shelter was designed to **withstand wind up to 250 mph.**

### Safe Room No. 1 (MS 406 Safe Room)

- Gross Area: 5,094 sq. ft.
- Usable Area: 3,839 sq. ft.
- Max Occupancy: 767

### Safe Room No. 2 (ES 406 Safe Room)

- Gross Area: 2,231 sq. ft.
- Usable Area: 1,896 sq. ft.
- Max Occupancy: 379

### Safe Room No. 3 (Community 404 Safe Room)

- Gross Area: 6,121 sq. ft.
- Usable Area: 5,819 sq. ft.





**RESULTS OF THE  
PROCESS AND PROJECT**





**CAN A SCHOOL KEEP A COMMUNITY INTACT?  
CAN A SCHOOL HELP REBUILD AND DRAW PEOPLE TO A COMMUNITY?  
YES. IN JOPLIN, BOTH ARE HAPPENING!**

Most projects don't get to have a role in helping keep a city and community together. We rarely get an opportunity to help support a large, very real goal such as this. But, for Joplin, it was a must. Without a school system, a community would fall apart. The people were already suffering enough and they needed to have a trusted piece of their lives back as soon as possible. It was imperative that the school district rebuild and do it quickly in order to keep its residents in Joplin.

“What we heard a lot after the tornado was ‘how will we rebuild?’ We kept saying ‘better,’ we will build back better. We think that we’ve done that.”

- ANGIE BESENDORFER, FORMER ASSISTANT SUPERINTENDENT  
JOPLIN SCHOOLS

May 29, 2011

**President Barak Obama:**  
Thousands hear message of  
support, reassurance



JOPLIN, Mo. — Obama said, “Today we gather to celebrate the lives of those we’ve lost to the storms here in Joplin and across the Midwest, to keep in our prayers those still missing, to mourn with their families, to stand together during this time of pain and trial. “And as Rev. Brown alluded to, the question that weighs on us at a time like this is: Why? Why our town? Why our home? Why my son, or husband, or wife, or sister, or friend? Why? “We do not have the capacity to answer. We can’t know when a terrible storm will strike, or where, or the severity of the devastation that it may cause. **We can’t know why we’re tested with the loss of a loved one, or the loss of a home where we’ve lived a lifetime. “These things are beyond our power to control. But that does not mean we are powerless in the face of adversity. How we respond when the storm strikes is up to us. How we live in the aftermath of tragedy and heartache, that’s within our control. And it’s in these moments, through our actions, that we often see the glimpse of what makes life worth living in the first place.**

“In the last week, that’s what Joplin has not just taught Missouri, not just taught America, but has taught the world.” Obama continued: “As the governor said, **you have shown the world what it means to love thy neighbor. You’ve banded together. You’ve come to each other’s aid. You’ve demonstrated a simple truth: that amid heartbreak and tragedy, no one is a stranger. Everybody is a brother. Everybody is a sister. We can all love one another.”**

As Obama spoke, his comments often were punctuated by applause and standing ovations. It reached its zenith when he talked about standing together in the future. “As you move forward in the days ahead, I know that rebuilding what you’ve lost won’t be easy. I just walked through some of the neighborhoods that have been affected, and you look out at the landscape, and there have to be moments where you just say, where to begin? How to start? There are going to be moments where after the shock has worn off, you feel alone. “But there’s no doubt in my mind what the people of this community can do. There’s no doubt in my mind that Joplin will rebuild. And as president, I can promise you your country will be there with you every single step of the way. “We will be with you every step of the way. We’re not going anywhere. **We will be with you every step of the way until Joplin is restored and this community is back on its feet. We’re not going anywhere.**

MAY 22, 2013

**MISSOURI GOVERNOR NIXON:  
JOPLIN OFFERS ‘A BEACON OF HOPE’**

JOPLIN, MO. — GOV. JAY NIXON OFFERED THESE COMMENTS DURING TODAY’S CEREMONY MARKING THE SECOND ANNIVERSARY OF THE JOPLIN TORNADO.

“TWO YEARS AGO, I DESCRIBED THE FOLKS HERE IN JOPLIN AS ‘THE TOUGHEST PEOPLE ON GOD’S GREEN EARTH.’ IT WAS TRUE. WE SAW IT EVERYWHERE WE LOOKED.”

“IT IS A LONG AND DAUNTING PATH. BUT THE LIGHT OF JOPLIN, AND THE HOPE YOU INSTILL IN PEOPLE, CAN HELP ILLUMINATE THE WAY.

“IT’S BEEN TWO YEARS, BUT WHEN WE SEE THE PROGRESS THAT YOU HAVE MADE. IT SEEMS MUCH, MUCH LONGER THAN THAT. BUT WHEN WE THINK OF THOSE WE LOST, IT SEEMS LIKE IT WAS ONLY YESTERDAY.



## **A VIEW FROM THE INSIDE**

**A day in the life of students and a teacher...learning  
about their experience.**

## A VIEW FROM THE INSIDE

Here's what these young students and teacher think about this new space and how it's impacting their lives.



**Rachel, 4th Grader:** What were you most interested in seeing?

"I was most interested in seeing the tree house. I wanted to know what you could do in a tree house. How do you feel about your new school? I was initially shocked, surprised and happy! It is wonderful. We had been using a mobile classroom and we now have a great new school with a track and basketball court, too!"



**Alex, 1st Grader:** What were you and your friends wondering about prior to getting to see the school?

"I heard kids talking about how excited they were to see the new school and get to go to the new school. I thought it was going to be big and exciting but I couldn't wait to see the outdoor courtyard. It's like a giant hole." How do you feel about your new school? "It feels incredible...there are so many things about the school and tree house that I get to enjoy. We get to study math in groups. We get to work in groups when we read, too."



**Micah, Kindergartner:** What do you like about the school?

"My favorite space in the school is the tree house.. It's really big. You can read books. My other favorite space is the outside classroom...a place that doesn't have a roof over it. Today I went over there with my running club. This school makes me feel happy."



**Daniel Holden, Joplin Teaching and Learning Coach:**

"Soaring Heights and East Middle feels like what school should feel like. The students are pressing the teachers to use the space and they have their own ideas about how we use the space. One of the classes was working on the Revolutionary War and a student thought it would be great if we should do a debate and play King George. They ended up moving the socratic seminar into the tree house and they were able to reenact and talk about why the King wanted to tax and debate the issue. This came about because the student wanted to solve the issues they were discussing...and the teacher hadn't really seen it yet."

**When we think about the future...we have to think about technology. This kind of building is designed to facilitate the technology change** because it has a lot of pieces in place for adapting for the new technology.

During the first week, we had everyone walk threw and state how the space would be used. Everyone walked through the schools and were told to mark every space with what they believed to be the primary way they would use the spaces. For many teachers, they put "sustained silent reading" (SSR). However, this simply is not the best use for our building and space. We're now seeing teachers sign up and NOT say the teaching style will be SSR. They're asking to use spaces for tinkering, science lab; solving problems and debates. **It has changed our approach from traditional teaching to innovative thinking.** The one thing that I see is that the building is a key character that impacts education. **When we talk about the places, they are a part of education. The spaces are co-educators.** The outdoor learning park isn't a space....it's an environment we go to...and its' spoke to with reverence and awe.





## DESIGNING HOPE FOR JOPLIN

The bottom line is this: educationally driven design is always about the kids. We want to inspire learning and create opportunities for students and teachers alike, so the spaces we created were designed together with Joplin. They weren't our own ideas. They were the results of our collaborative sharing and processing the wonderful new aspirations in front of them. It's our desire that the students and teachers of Joplin are able to dream as big as they want and create fantastic futures for their lives and community. Our hopes were realized in just the simple chance to concept with them. In the end, we're the better architecture team because of their great hope for their community.



A TEACHER ASKED: DOES THIS FEEL LIKE A SCHOOL?

“NO, TO ME IT FEELS  
LIKE HAPPINESS!”

-Joplin Soaring Heights Student

Thank you!

