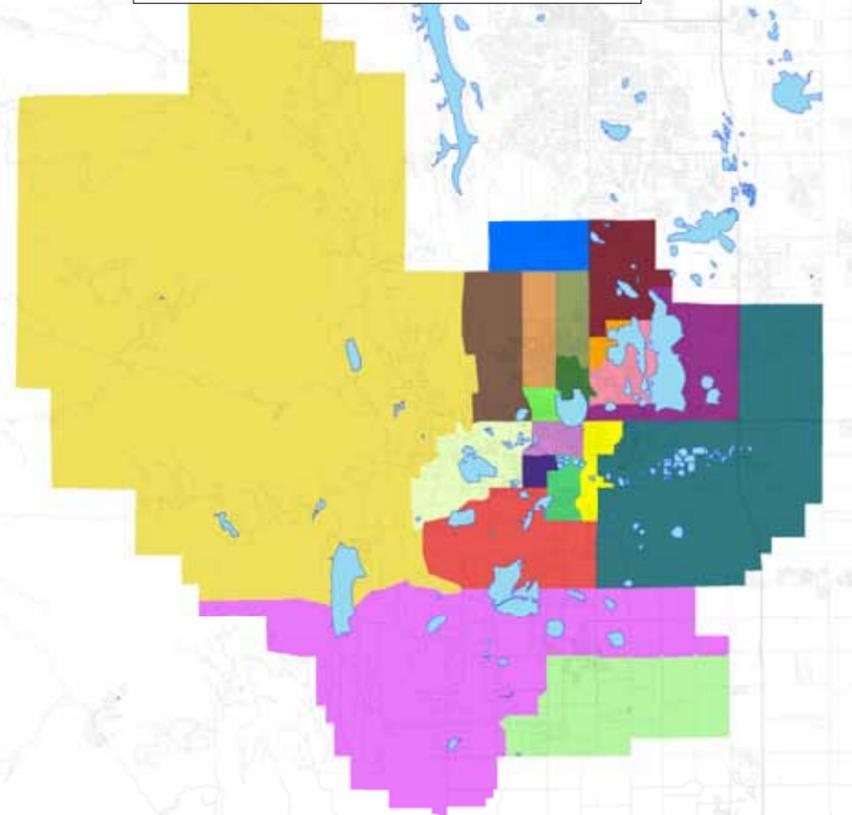


Thompson R2-J School District
Elementary Boundaries



Boundaries

Elementary NAME	Color	Elementary NAME	Color	Elementary NAME	Color
Centennial	Orange	Lincoln	Green	Stansberry	Yellow
Cottonwood	Red	Mary Blair	Pink	Truscott	Light Yellow
B F Kitchen	Light Green	Coyote Ridge	Blue	Monroe	Purple
Berthoud	Pink	Edmondson	Olive	Van Buren	Light Green
Big Thompson	Yellow	Namaqua	Light Green	Winona	Dark Green
Carrie Martin	Red	Garfield	Purple	Ponderosa	Brown
		Ivy Stockwell	Light Green	Sarah Milner	Dark Purple



Thompson R2-J School District
Learning Landscapes

MASTER PLAN



Fall 2011

B.F. Kitchen Elementary

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Presented by:



B.F. Kitchen Elementary

Section One

1



Executive Summary

- Introduction
- Thompson District Background
- Master Plan Intent and Process
- Recommendations
- Learning Landscapes Background



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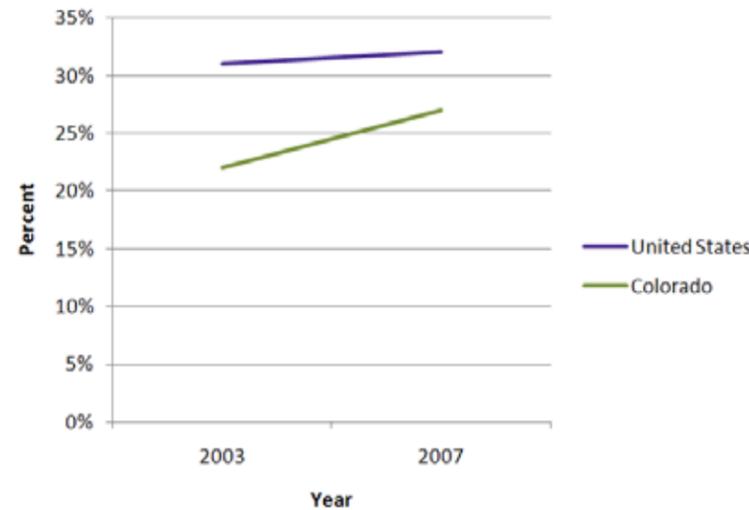


B.F. Kitchen Elementary

Introduction

Schoolyards provide an opportunity for the built environment to promote increased physical activity for children and the surrounding community. In addition, studies show that well-planned and equipped schoolyards increase physical activity while also enhancing the learning environment resulting in improved achievement. Such play areas provide physical and mental challenges that translate to improved health and learning attention. Furthermore, with proper design, these areas themselves become outdoor classrooms or learning landscapes and fulfill, a secondary goal for many schools to become a positive focal point of the neighborhood, place to gather and to meet, a place to enjoy, a place that enhances the community's appearance.

Children Who Are Overweight or Obese



Improving schoolyards is a proactive way to benefit health at the community level. The surge in childhood obesity, in recent years, threatens the future health of Colorado. According to the Colorado Health Report Card, published by the Colorado Health Foundation, "Colorado ranks 23rd among the states in the category of childhood obesity, dropping in rank from 3rd to 23rd in just four years." The current ranking signals a rapid increase in the prevalence of childhood obesity that negatively impacts the overall health and well-being of Colorado's children. Preventing and combating the childhood obesity epidemic will require a multi-faceted approach. "It means changing behaviors around food intake, physical activity and our residential community. It means addressing the environment in schools and rethinking our culture to emphasize good health," says James O. Hill Professor of Pediatrics and Medicine at the University of Colorado School of Medicine.

2011 University of Colorado at Denver



In April 2011 the B.F. Kitchen Elementary was awarded an Active Play Areas planning grant from the Colorado Health Foundation. The Colorado Health Foundation believes that if kids are a part of a “healthy school” including but not limited to access to physical activity and healthy foods, then they will be more likely to learn better and maintain a healthy lifestyle throughout life. In addition, The Foundation upholds that thoughtful design of a new or renovated activity space at the children’s school can promote greater levels of moderate or vigorous physical activity and decrease sedentary activity.

The Active Play Areas planning grant provided an opportunity for the school district to partner with Learning Landscapes at the University of Colorado Denver to develop an active play area master plan for B.F. Kitchen Elementary School.



The Learning Landscape program within the Colorado Center for Community Development at the College of Architecture and Planning seeks to strengthen elementary schools and their surrounding neighborhoods by designing playgrounds to promote physical activity and social interaction. With over ninety schoolyard renovations complete, the success of this program is founded on a mutual respect of aesthetic, maintainability, safety, and recreational issues.

Colorado Health Foundation

The Foundation seeks to fund active play spaces for schools designed to promote play and other forms of physical activity. This includes field/ground designs or markings that facilitate games and other forms of movement.

Vision:

Colorado will become the healthiest state in the nation.

Mission:

To improve the health and health care of Coloradans by increasing access to quality health care and encouraging healthy lifestyle choices.

To support the goal of Healthy Schools and Healthy Communities, the Foundation seeks to fund active play spaces for schools designed to promote play and other forms of physical activity. This includes field/ground designs or markings that facilitate games and other forms of movement.

The Active Play Areas Plan supports the Foundation’s following funding strategies:

1. Develop healthy schools -- Expand the number of public schools and preschools that provide health care services, have health and nutrition education, physical education, healthy food in cafeterias and vending machines, and opportunities for physical activity.
2. Promote healthy communities -- Expand access to healthy and affordable foods; provide safe options for physical activity; teach individuals how to manage their chronic disease; and engage parents in raising healthy kids.

Implementation of the Active Play Areas Master Plan can be measured by the Foundation’s following measurable results:

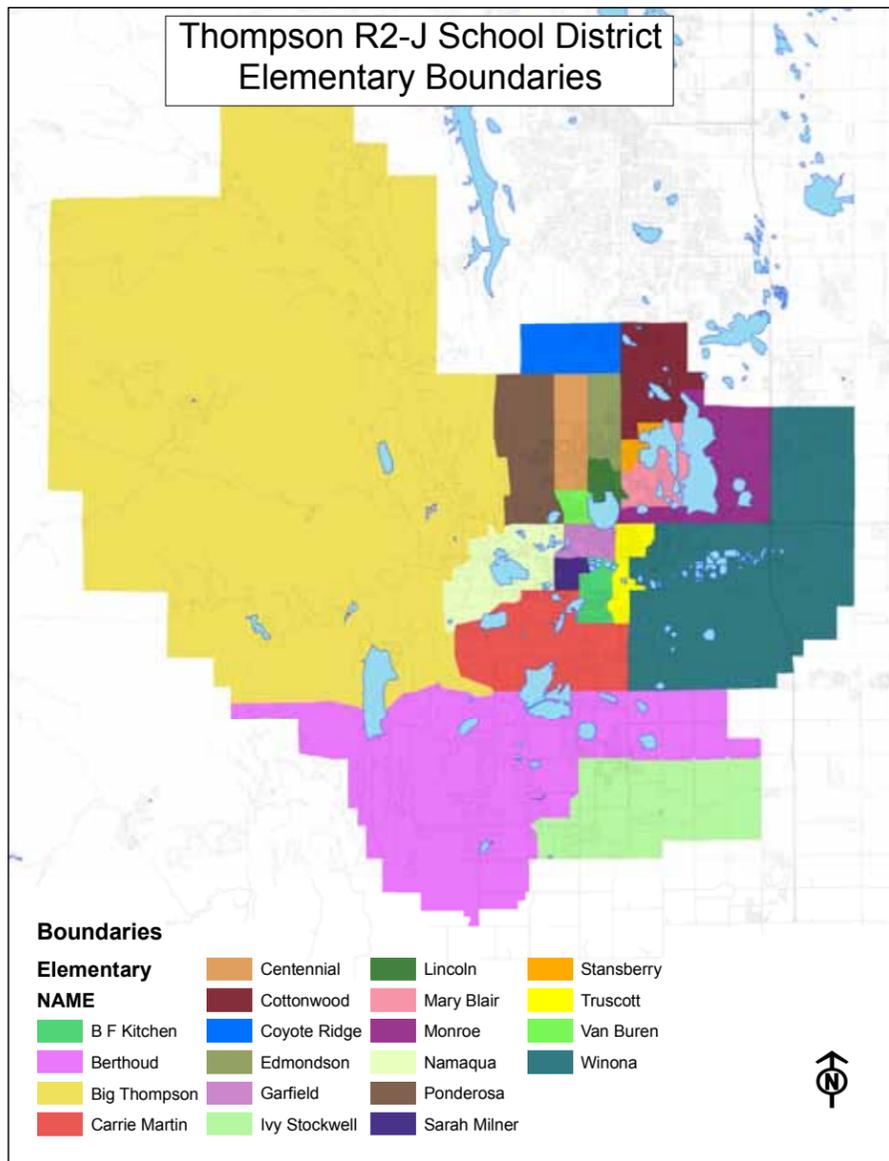
1. Increase the number of children and adults who engage in moderate or vigorous physical activity.
2. Increase the number of children and adults who eat adequate amounts of fruits and vegetables daily.
3. Increase the number of under-served Coloradans who have convenient access to recreational exercise and fruits and vegetables.



Presented by:



B.F. Kitchen Elementary



Thompson R2-J School District

The Thompson R2-J School District was formed in 1960 when nine smaller school districts were reorganized into a single larger district. The district is the 16th largest school district in Colorado, encompassing 362 square miles primarily in Larimer County, and including small portions of Weld and Boulder Counties. Thompson School District is the largest employer in Loveland and Berthoud.

Thompson is a pre-K through 12th grade district with nine early childhood centers, 20 elementary schools, five middle schools, five high schools and one charter school. District enrollment for the 2010-2011 school year is 15,350 students. The district includes the cities of Loveland, Berthoud and the southern part of Fort Collins as well as parts of Larimer, Weld and Boulder counties.

The Thompson School District community has a relatively prosperous population of residents with only 33.5 percent of students in the district qualifying for free or reduced lunch. The largest racial demographic groups of the district include 77.3 percent Caucasian students, 17.9 percent Hispanic, and 1.2 percent Asian. With over 20 different languages spoken by its students, Thompson School District reports only 3.4 percent of students identifying Spanish or another language as their primary language.

- Total Enrollment 15,350
- 77.3% Caucasian
- 17.9% Hispanic
- 1.2% Asian
- 0.9% African American
- 0.6% American Indian
- 0.4% Native Hawaiian
- 1.6% Multiple Races (non-Hispanic)

Empower to Learn, Challenge to Achieve, Inspire to Excel!

-Thompson School District Mission

Wellness

The Loveland/Berthoud area is located on the Front Range of the Rockies at about 5,000 feet. Less than an hour from both Rocky Mountain National Park and Roosevelt National Forest, the area offers recreational



opportunities including: miles of hiking and biking trails; parks; lakes and rivers for fishing, boating and camping; numerous golf courses and athletic fields; as well as indoor and outdoor swimming and recreation facilities. Abundant higher education campuses and cultural opportunities are within a short distance.

Existing Challenges

Thompson School District is a high achieving district making do with the resources allotted to it. The state of Colorado ranks below most western states in funding per student. Within Colorado, the Thompson School District ranks at the bottom of funding when compared to those within Denver Metro and the Northern Colorado region. Teachers and staff at the school claim that they have the smallest classrooms in the district, and the smallest gym – which doubles as the school cafeteria. Thompson School District is a district that is growing and adapting to the changing demographics of the local community. In its "Vision 2020, The Case for Change," the district predicts that the percentage of non-white students will rise from 26% to 46%. This growth will require school staff to adapt to new cultural

and communication challenges. Another focus of the Vision 2020 document is the redefinition of the learning environments within its schools. Learning environments are currently defined by *nouns* like “desks” and “chairs.” In the future, the district seeks to change the focus to *verbs* such as “connect,” “build,” “analyze” and “design.”

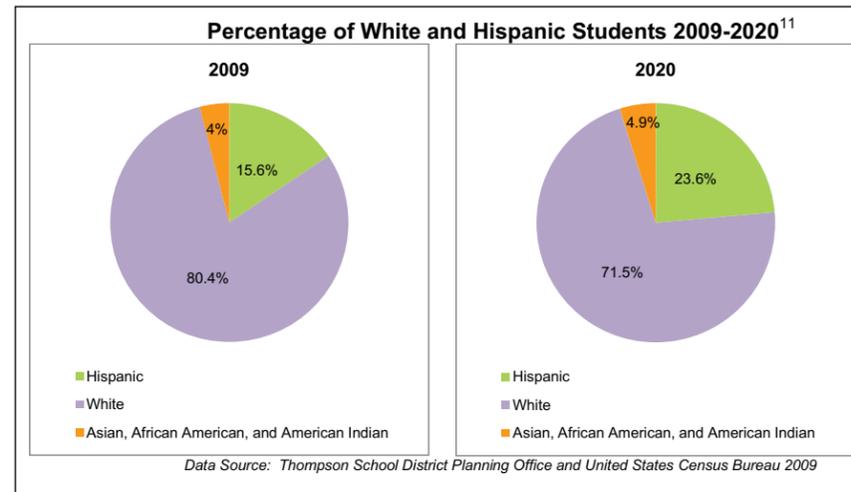
Related Efforts & Integration

District Facilities Master Plan

The Board of Education for the Thompson School District R2-J created a Master Plan Committee in 1995. The charge of this group was, and still is, to provide an ongoing assessment of school facility conditions. The Thompson School District has had seven successful bond elections for capital construction projects since its formation -- two in the 1960s, two in the 1970s, one in 1989, one in 1996, and one in 2005. The most recent election authorized \$89.21 million in bonds to renovate buildings and increase district school capacity. Of the



Changing Demographics



“The Thompson School District is a high achieving school district, and in our quest for excellence, we know we must become better.”
 -Thompson School District’s “Vision 2020, the Case for Change”

\$89.21 million in funds from the 2005 Bond Package, \$35.6 million were to be focused on extending the life of existing district buildings by renovating, repairing, and/or replacing building systems. Unfortunately, this does not address outdoor spaces or play areas.

Among the target items were fire alarm systems, emergency lighting, roof and ceiling replacements, boiler and hot water heater replacements, asphalt repairs and sealing, HVAC pumps and rooftop units, and basic door and hardware replacement.

BF Kitchen has benefitted as a result of the bond with some infrastructure improvements. These include an irrigation system upgrade, a new video surveillance system, new trees at the front of the school, improved exterior lighting, and repairs to the school’s parking lot. These efforts, unfortunately, did not address the play areas which are a part of the active play areas master plan.

Intent of the Play Areas Master Plan

The master plan is intended to serve as a roadmap for proactively developing strategies and tactics needed to develop a sound, safe and active play area that has been proven to increase activity for students and surrounding community members. The purpose of the master plan is for BF Kitchen to be strategically poised to capture opportunities to improve and expand play areas as funding become available. The master plan is intended as a tool for the staff, parents, and district administration to seek funding for future schoolyard renovations and wellness initiatives.

A master plan is a written report and plan that sets forth the structure for future campus improvements. Each school has a vision that speaks to the desires of the school and surrounding community. The vision is further delineated into goals that identify the major components for implementation. These goals are defined through the use of text and imagery. A programmatic list of uses is also developed. Lastly, the master plan sets forth the aesthetic ordering system suggested for use during the design phase to organize the programmatic uses. This plan will provide a framework for fund raising and future construction.



Presented by:



Planning Process

The Master Plan process took place from May to October 2011 and involved input at both the district level as well as the individual school level. At the district level the collaborative process was guided by the Wellness Coordinator, school faculty and staff, and the Facility Management division. Learning Landscapes staff consulted with the district team members to ensure the individual school master plans aligned with the existing facility master plan, and the over all vision for the District. The team also discussed strategies for phasing, sustainable maintenance and funding for implementation.

At the school level the collaborative process was guided by the schoolyard improvement committee and facilitated by Learning Landscapes staff. The committee was comprised of the principal, facilities staff, members of the school's wellness team, parents, and teachers. The team

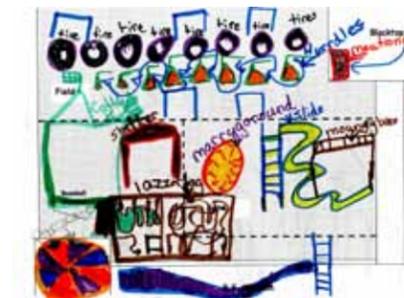
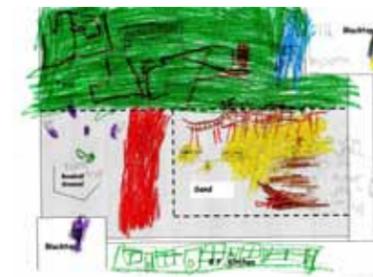


members helped to identify issues with the existing site, form a vision and goals to guide the planning process, gather information and feedback from people outside the committee, provide feedback on iterations of the plan, administer photo surveys and collect student art work.

This collaborative effort allowed the school to develop an active play areas master plan to reflect the history, culture and curriculum unique to BF Kitchen Elementary School in accordance with its health and wellness focus.

The planning process consisted of the following tasks:

- Design team meetings
- Site inventory and analysis
- Play equipment assessment
- Schoolyard use assessment
- Community engagement
- Photo surveys and student drawings
- Master Plan recommendations
- Cost Estimates and prioritization



Student Drawings of "My Dream Playground" by BF Kitchen Elementary's talented and creative students.



Recommendations

Improved play facilities will serve multiple purposes in not only engaging Thompson School District students, but the entire community. The following are recommendations for implementation of the Active Play Areas Master Plan at BF Kitchen Elementary School.

- Install New Age-Appropriate Play Equipment
 - To increase physical activity for all ages and to provide a variety of safe, challenging activities for all students.
- Install a Running Path
 - To provide opportunities for students, teachers, staff and community to be active and encourage each other to get moving. This will also increase participation in the school's yearly "Tiger Trample" fund-raiser.
- Install Climbing Structures
 - To increase upper body strength and coordination.
- Improve ADA Accessibility
 - Each play area should be accessible to all the students in the school. It is important for all students and community members regardless of mobility, to be able to interact and be active with one another.
- Provide More Hard Surface Games with Educational Elements
 - Input from the design committee and student surveys suggested adding more color on the schoolyard. Students are excited by the color which sparks their creativity during play.
- Relocate Existing Vegetable Garden
 - To promote healthy eating, community stewardship, educational opportunities, and food literacy.
- Develop Outdoor Learning Environments
 - Spaces for teachers to bring students outside to interact with the landscape as an educational system
- Develop Community Gathering Spaces
 - Welcoming the neighborhood to gather, play, and exercise in the play areas will help build support stewardship of the community by providing a safe place to be active not just during recess but also after school and on weekends.
- Provide an Outdoor Lunch Area
 - Allow students to enjoy fresh air on warm or sunny days and reduce the number of students inside the small cafeteria.
- Increase Opportunities for Shade
 - To protect students and visitors from the intense Colorado sun and to provide additional gathering spaces for community members.
- Create an Outdoor Classroom
 - Give teachers the option to instruct students outdoors to interact with and observe the local environment.



Presented by:



B.F. Kitchen Elementary

Learning Landscape History

The first Learning Landscape was built at Bromwell elementary school in 1998 as a result of a six-year collaboration of parents, elementary students, staff, faculty, neighbors, local businesses and University of Colorado Denver (UCD) landscape architecture graduate students. The vast expanse of asphalt and pea gravel on the Bromwell playground resembled a



prison yard, not an environment encouraging activity and child development. Bromwell parents and community members took action to transform the schoolyard into an active and aesthetically pleasing place for learning and physical activity.

Bromwell's schoolyard renovation project coincided with the end of mandatory busing at Denver Public Schools (DPS). Cessation of mandatory busing meant a renewed interest in Denver neighborhood schools and soon the Bromwell Learning Landscape project evolved into a citywide urban initiative evoking social change and physical transformation of public grounds.

UCD encourages faculty to connect the campus to the community. Landscape Architecture Professor, Lois Brink's Learning Landscapes course proved a tremendous opportunity for civic engagement. Through Learning Landscapes, UCD graduate students are able

to stretch the boundaries of landscape design, engage the community and gain real-world design experience. In 1999 (UCD) College of Architecture and Planning entered into a formal agreement to plan, design, and help build Learning Landscapes at DPS elementary schools throughout the district. The partnership between UCD and DPS has resulted in the transformation of 81 neglected public elementary schoolyards into Learning Landscape Playgrounds.

In 2008 Denver voters expressed satisfaction with the program by passing a multi-million dollar bond initiative to fund the redevelopment of every DPS elementary schoolyard into a learning landscape by 2013.

What We Do:

With a budget of approximately \$450,000 per playground, Learning Landscapes leads UCD students, elementary schools and community members in the redesign of schoolyards into fun multi-use parks designed to reflect the culture of the surrounding community. The Learning Landscapes project helps reconnect communities with neighborhood schools. The graduate students get meaningful, hands-on experience working with the community to create master plans and designs for a Learning Landscapes schoolyard.

How We Do It:

By listening and actively involving the school community throughout the planning, design, construction, and maintenance of the Learning Landscape schoolyard. Each school is asked to form a Learning Landscape team to help inform design and programming decisions as well as keep a watchful eye for vandalism and maintenance issues after construction is complete. The Learning Landscapes team recruits students, parents

and surrounding community help to build, maintain and improve the Learning Landscape. Each new learning landscapes has a volunteer build day where the school and community volunteers develop a sense of ownership and civic pride by creating outdoor artwork planting gardens, laying sod or building play equipment.

We document and distribute site-specific resources for educators and community members on the outdoor educational elements unique to each Learning Landscape schoolyard. Promoting the programmatic use of the Learning Landscape is critical for the long-term viability and sustainability of these projects.

Community Involvement

Inevitably each site is used by the community when the schools are not in session. As such we feel it is important to work with community leaders to get feedback on the communities needs and desires to determine how the communities use the site and what other organizations help maintain the site - like the Parks and Recreation, softball leagues, soccer leagues, gardening clubs, etc.



Outdoor Art



Gateways



Climbing Structures



A **Learning Landscape** is a multi-use park for outdoor learning, discovery, creativity and play that celebrates the unique character of the **school and community**.

Learning Landscapes are comprised of grass playing fields, age-appropriate play equipment, trees, shade structures, gateways, artwork, class room gardens, traditional play elements and non-traditional play elements among other things.

Shade Structure



Grass Fields



Outdoor Classroom



Learning Landscapes function as local public parks providing much needed open space and social gathering places while fostering neighborhood pride for local communities.

Educational Elements tend to be focused on the unique curriculum of each school. Educational elements also tend to be derived from the schools theme, mascot, motto, etc. These components come in the shape of games that are super imposed on the hard court surfaces and or words, poems, mathematical formulas etc. These educational elements can be tied to the schools curriculum whereby school teachers can use these elements by bringing their class rooms outside. Or the learning components are simply whimsical things that all the kids to use their imaginations while playing hopscotch, tether ball, what have you.

Habitat & Vegetable Garden



Age Appropriate Play Equipment



Maps & Hard Surface Games



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B.F. Kitchen Elementary

Section Two

2



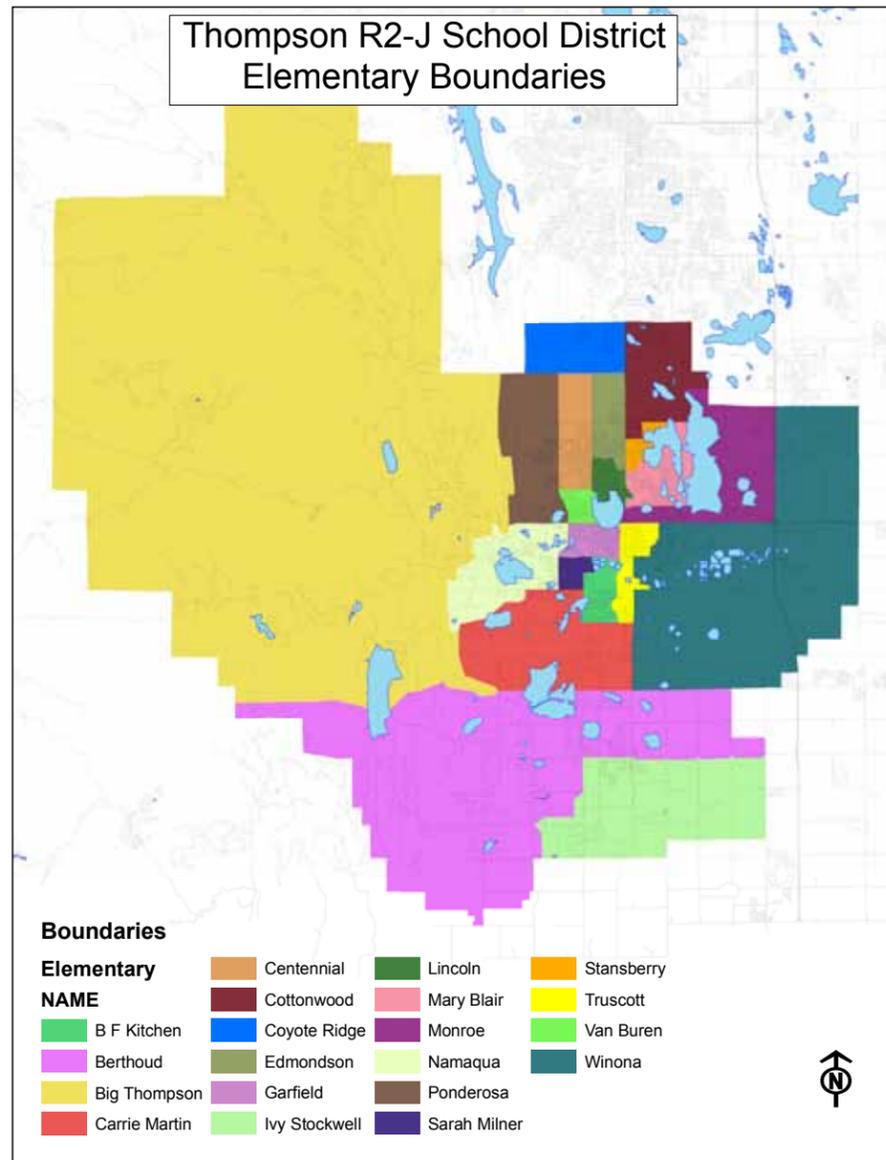
- School Background
- Existing Conditions
- Playground Assessment



Presented by:



B.F. Kitchen Elementary



School Background Information

Location and History

B.F. Kitchen Elementary school is located at 915 Deborah Drive and South Douglas Avenue in a residential area south of downtown Loveland. Built in 1969, B. F. Kitchen Elementary was named in honor of the first Superintendent of Larimer County, Benjamin Ford Kitchen. Mr. Kitchen was also the first principal of Loveland High School. In 2003, B. F. Kitchen became a school-wide Title I school. In 2008, the school was designated as a Health & Wellness Focus School by a team that included staff, students, parents, community members and district personnel. The total site is approximately 7 acres, with Deborah Drive at the southern boundary of the site, Daphne Drive to the north, Douglas Ave. to the east, and Sherri-Mar Park to the West.

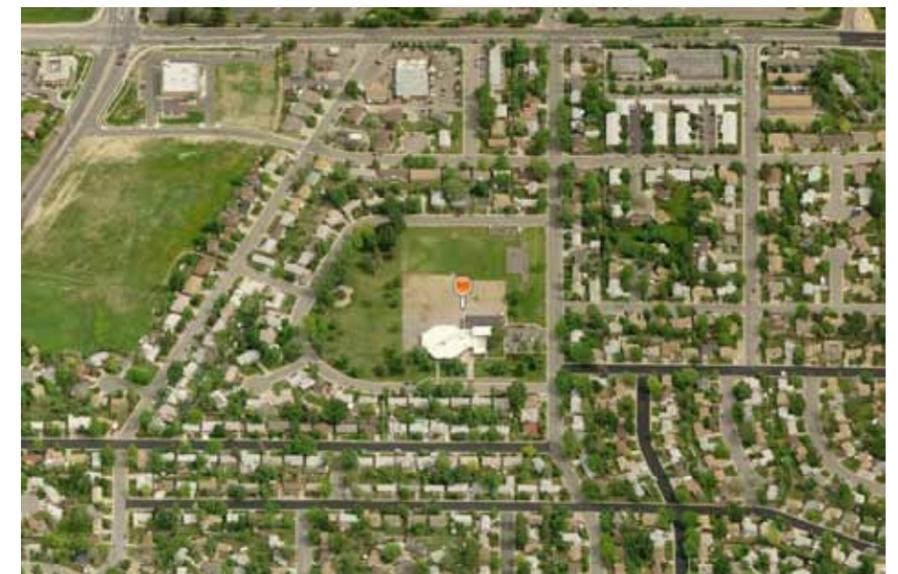


B.F. Kitchen’s curriculum is focused on health and wellness, which promotes a healthy school by supporting student wellness, good nutrition, and daily physical activity. Students attend daily PE classes and eat lunch after recess. The school mascot is a white Bengal tiger and the school colors are royal blue and white. As of spring 2011 the enrollment was 262 students. According to the Thompson School District’s 2010-11 Master Plan, projected enrollment for B.F. Kitchen in 2014 will have space for 39 students before reaching maximum capacity.



Neighborhood Context

The neighborhood around B.F. Kitchen is mostly comprised of single-family detached housing on small neighborhood streets. The neighborhood is bordered by open agricultural lands and has a rural character. The school and the adjacent Sherri-Mar Park provide one of several playground and open-space areas in the neighborhood. The school invites the surrounding community to be involved in activities such as the yearly “Tiger Trample” jog-a-thon, and cultivation of a small garden operated by the Loveland Youth Gardeners. The fields are used by the Loveland Baseball Association during the summer, and sometimes by the City of Loveland for soccer games.



School Mission

“B. F. Kitchen Elementary, along with our community, commit to academic excellence as a Health & Wellness Focus School by promoting high academic standards, physical activity, good nutrition, and positive choices for each and every child.” (<http://www.bfkitchen.org>)



School Demographics

Spring 2011 Enrollment: 262 students

Male Students: 139
Female Students: 123

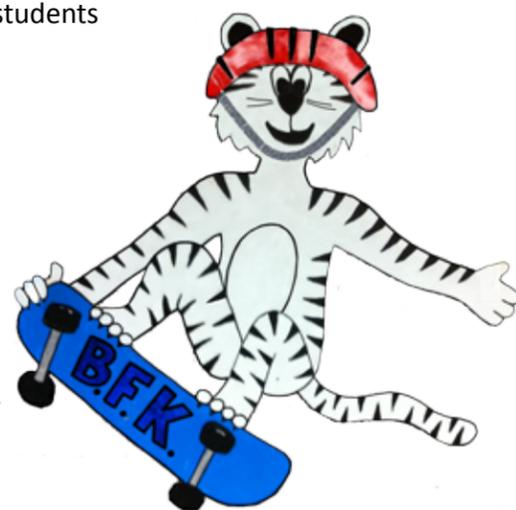
Free/Reduced Lunch: 58.8% of students

Racial Make-up of Students:

White: 71.2%
Hispanic: 26%
Other: 2.8%

Grade Distribution of Students:

Kindergarten: 46
1st grade: 43
2nd grade: 42
3rd grade: 46
4th grade: 39
5th grade: 46

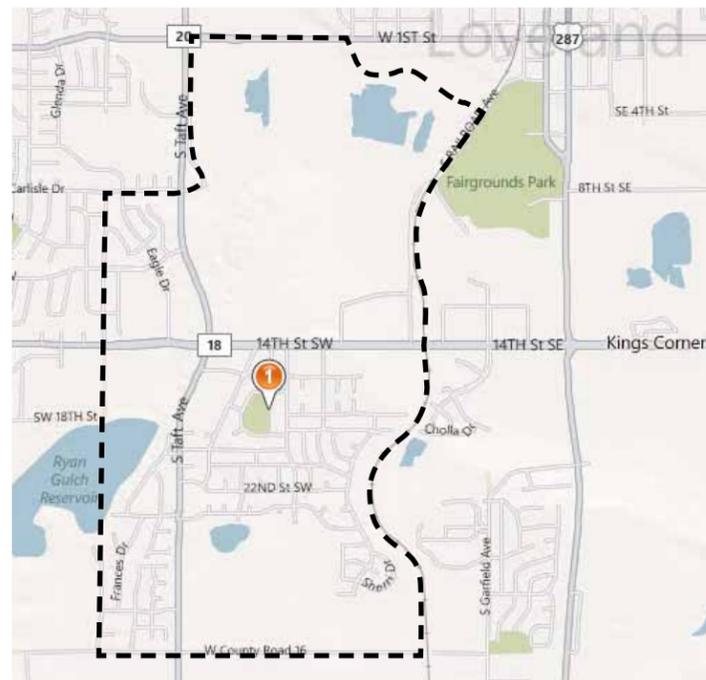


Surrounding Area Demographics

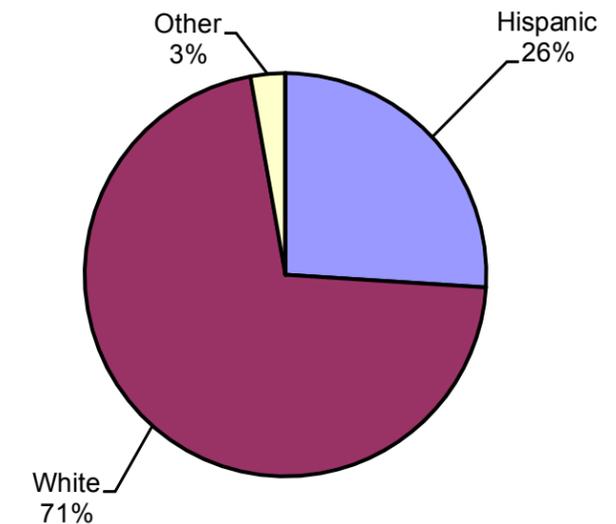
As of the 2010 Census there were approximately 6,600 people living in the area surrounding the school, with about 90% of housing units occupied. According to the 2005-2009 American Community Survey estimate, the median annual household income for residents within the Thompson School District was \$54,755 and 67.4% of units were owner-occupied compared to 32.6% rented.

Catchment Area

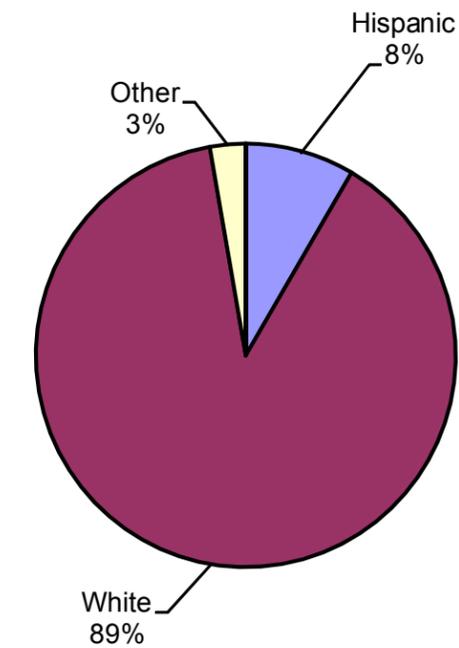
B.F. Kitchen draws students from a 1.8 square-mile geographical area contributing to a high percentage of students that walk to/from school. The attendance boundaries are W. 1st St. and Carlisle Dr. to the north, 28th St. SW to the south, the railroad to the east, and by a line running n/s from the intersection of 14th St. and Tyler St. to the west. There are few, if any, physical barriers limiting access to the school from the catchment area. 14th Street is the only major road within this area that acts as a physical barrier. Pedestrian and bicycle connection to the school is good, comprised mainly of small streets and quiet residential blocks.



2010 BF Kitchen Demographics



Surrounding Area Demographics



Presented by:



Existing Conditions:

Equipment & Materials

The B.F. Kitchen Elementary playground is located on the north and west sides of the school. It is comprised of a large grass area with soccer fields, two asphalt play areas with four-square, tetherball, and hopscotch games, and a large play pit covered with a loose layer of coarse gravel. The first gravel area has a baseball/softball diamond with a backstop, the second contains traditional play structures and swings, and the other is empty except for a bike rack. The large grass field is where the majority of students play during recess – mostly soccer.



Drop-off/ Pick-up lane on Deborah Drive

ADA Accessibility

A majority of the building entrances are ADA accessible. Only one of the five play structures on the site is ADA accessible with a ramp, transfer station, and ground-level activities. The remaining structures are not accessible since the primary play pit to the north is filled with non ADA-compliant gravel.

Safety

Issues of safety were addressed by the design team during the meetings:

- The asphalt play area has drainage issues that create slipping hazards especially during cold months.
- Goat heads (aka puncturevine) within the gravel areas produce stickers that cling to clothing and can pierce skin.
- Existing metal play structures heat up during hot days.
- Tetherball courts are too close together and block the walkway onto the NE asphalt pad.
- Loose gravel in the play area can be thrown and cause bodily injury or property damage.
- Loose gravel can also travel onto adjacent walkways, creating a slipping hazard.



Gravel spilling onto playground walkway



Close-up view of goathead vine and seed pod

Circulation and Site Accessibility

B.F. Kitchen has one primary entrance into the school off of Deborah drive. The school ground has pedestrian access points for students and parents at the northeast corner of the property and from the parking lot on the east side of the property. Recess is accessed from individual classrooms.

The school district provides no bus service to or from B.F. Kitchen. The drop-off/pick-up area is a parallel pull-off lane on Deborah Dr. directly in front of the main school entrance. Deliveries and service vehicles are accommodated within the parking lot on the east side of the building.

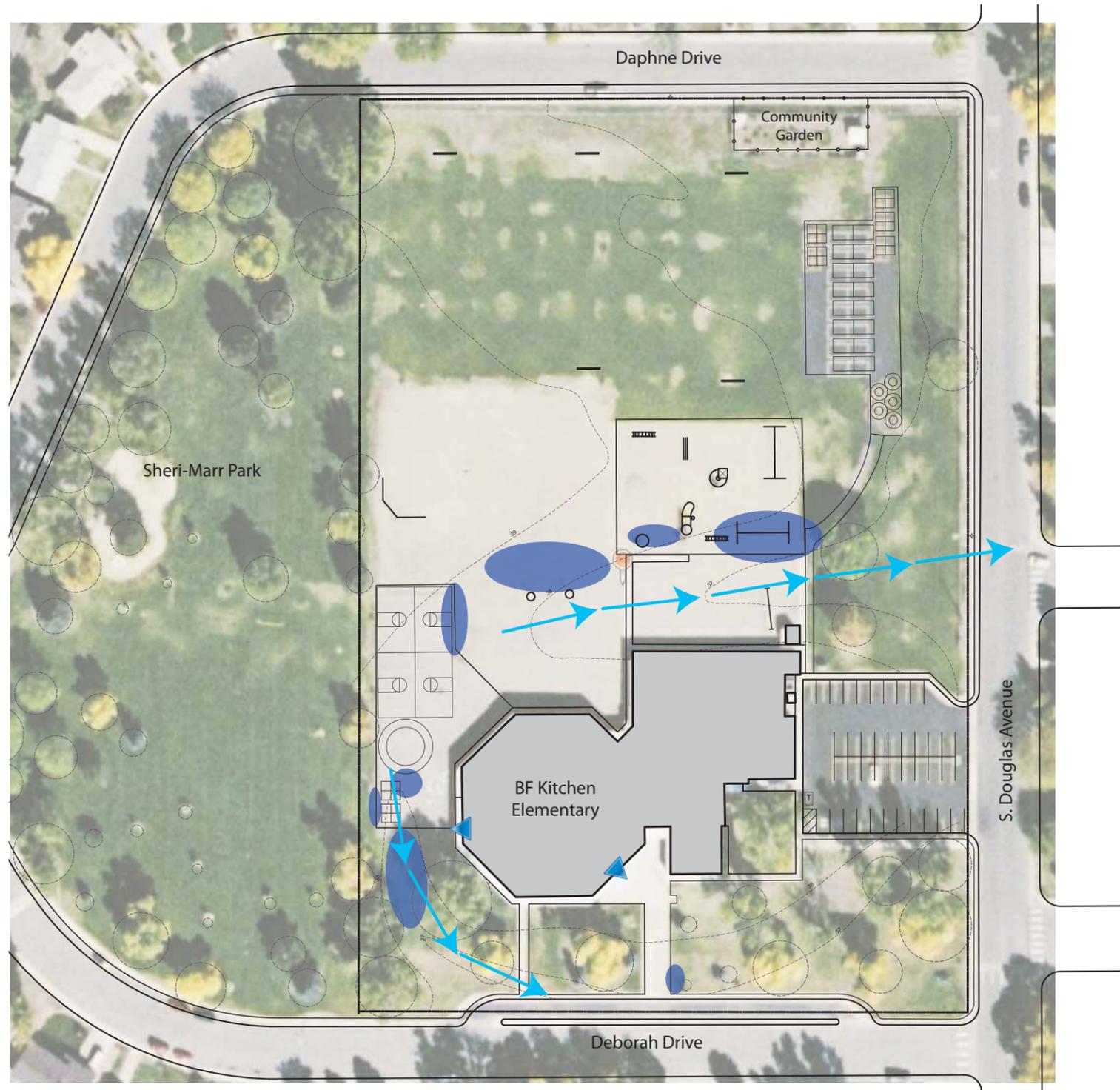
Parking

B.F. Kitchen has one parking lot one on the southeast corner of the site that holds 40 vehicles with two handicap spots. This lot is relatively small but seems adequate for faculty and staff. Additional parking is available on street at Deborah Dr. and S. Douglas Ave.

Maintenance

The entire schoolyard is equipped with an irrigation system, the grass fields and existing trees and shrubs are well maintained. Play area surfacing poses a maintenance issue as the gravel from the swing pit spills onto adjacent walkways and also allows weeds to grow through. Some of the asphalt areas are cracked and in need of resurfacing. There is small community garden on the northeast corner of the site maintained by the Loveland Youth Gardeners.





BF Kitchen drainage diagram showing problem areas and general flow direction.

- Key**
- Pooling areas
 - Flow Direction
 - Downspouts

SCALE: NTS

Drainage

In general the site drains away from the school to the east and south. Major pooling areas were observed within the main gravel play pit, adjacent lawn areas and within the asphalt area directly west of the school. Two roof drain outlets located on the front side of the main building direct water onto hardscape areas. These could cause ice to build-up during winter months and create a slipping hazard.



After rain storms, the playground is affectionately referred to as "Lake BF Kitchen"

Existing Vegetation Conditions

B.F. Kitchen's grass fields are maintained by the Thompson School District service center. The grass is in good condition but has been invaded by goat head weeds in some areas



Mature trees in front of school including a dedicated tree in memory of a student.

(although signs of weed abatement measures were visible during the last site visit). The school grounds only have a few mature trees in the playground area providing shade. Most of the mature trees and landscaping are located in the front of the building along Deborah Dr. and in Sherri-Mar Park

to the west of the school. The small community garden on the northeast corner of the site is operated during summer months by the Loveland Youth Gardeners but has the potential to be incorporated with the 2nd grade plant unit.



Presented by:



Existing Conditions Map & Playground Assessment



Playground Assessment:

The playground at B.F. Kitchen Elementary is located to the north and east of the school building and is comprised of four main areas. These include a large grass area with soccer fields, two asphalt play areas (with four-square, tetherball, hopscotch, and basket ball courts) and a gravel play structure area.

The first play area is a large grass field measuring 124,000 square feet on the northern edge of the playground. This area has several soccer goals which are used mainly by 4th and 5th graders during recess. This field is also used during P.E. class for running as five laps around the field equals about one mile. The fields are in good condition and are well-used by students and the surrounding community.



The second play area is a 9,500 square foot asphalt pad surrounded by grass in the northeast corner of the playground. This area is painted with five tetherball courts, eight small "practice" tennis courts, and five four-square courts. This area is used during P.E. class to practice tennis. The asphalt is in fair condition with some minor surface cracks, some wearing paint and a few areas that collect water during rain. The tetherball courts are very close to each other and block access from the walkway on the south side which creates a safety issue.



area, there are six play structures and two swing structures each with six swings. Many of the structures are outdated metal climbers. Only one of the structures, installed in 2003, is ADA accessible. The entire gravel area suffers from poor drainage, with major pooling areas beneath the funnel ball and one of the swing structures. None of the play structures currently have signage to indicate the appropriate age groups for use. Overall the play areas do not contain enough features catered towards special needs students, or adequate age-appropriate activities.

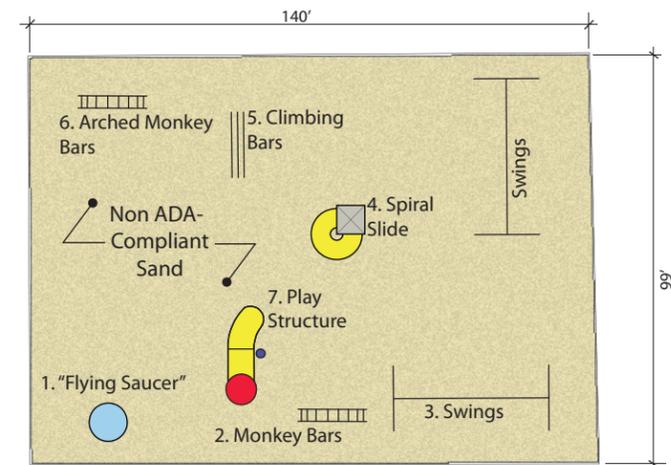
The third play area is a large gravel area measuring 61,000 square feet. This area is delineated by a concrete curb and sits adjacent to the north side of the school building. It is the first area encountered upon entering the playground. Two funnel ball baskets and a baseball backstop are located on the west side, with some traditional play structures and a bicycle rack on the east side. The west side suffers from invasive goat head, or puncture vine, which produces seed-heads that cling to students' clothing. This area also lacks adequate play features for the amount of space available. On the east side of the gravel



The fourth play area is an asphalt pad on the west side of the main building. This 12,400 square foot area contains two small basketball courts, five four-square courts, a circular game court, and a painted map of the United States. This area is mainly used by younger students (1st and 2nd graders). The basketball goals are in good shape, although they could benefit from more durable nets. The asphalt is in good condition but has some surface cracks and several low points in the southwest corner where water collects during rain.



Play Area Enlargement



Most existing structures are outdated and/or unsafe. The loose sand surface is not ADA-compliant and has the potential to spill onto adjacent walkways. There is also a general lack of age-appropriate play structures for younger children.



Section Three

3



- Design Advisory Team
- Vision, Goals, Wish List
- Ordering System
- Master Plan



Presented by:



B.F. Kitchen Elementary

Design Advisory team

The playground design advisory team played a critical role in creating the B.F. Kitchen Elementary Active Play Areas Master Plan. The design team was made up of the school Principal, the district wellness coordinator, facilities services staff, and assorted teachers. Attendance to each meeting varied based on staff availability.

Advisory Team Process

The processes leading up to the master plan started in May of 2011 with a visit to the school and a meeting with the school's Principal, facilities project manager and District Wellness Coordinator. The result of this visit was an understanding of the needs and wants from the school and an understanding of general maintenance concerns from the facilities staff.

At the next meeting, the Learning Landscapes team brought some collages, shown at left, to spark the creative process in thinking of ways to incorporate educational elements into the playground. This way, the educational realm can extend beyond the classroom and become associated with play and physical activity.

In ensuing meetings, the Learning Landscapes staff introduced some conceptual plans to generate a discussion of priorities and associated budgetary ramifications. From the three conceptual plans, shown on the next page, the design committee extracted some ideas from each one to come to a consensus on a preferred master plan.

Constituent Concerns, Needs, and Desires

Concerns:

- Lack of age appropriate play equipment for primary and Pre-K age groups.
- The play equipment is outdated and uninviting.
- There is no shade on the playground.
- Gravel from the playground travels onto the asphalt and the sidewalks creating safety issues.
- Paved area gets very hot in warm months.
- PE classes need more outdoor space due to very small gymnasium.



Needs:

- Accessible safety surface in play area.
- A shade structure or additional trees to provide shade for students and teachers during recess and PE classes.
- Promote healthy eating and active living at school.
- Create more variety of activities spread throughout the large playground area.
- Address drainage issues in play area and adjacent turf.

Desires:

- Incorporate health and wellness and general educational elements on playground.
- Create a jogging path around the schoolyard.
- Incorporate existing vegetable garden into science curriculum to spark curiosity and promote healthy eating at school.
- Incorporate regulation sports fields to provide additional game/practice locations for local organized sports leagues.
- Develop the playground to improve school's self-image and provide a positive asset to the community.
- Update play equipment to increase visual interest and promote healthy activity.

Defining the School's Vision

Over the course of several meetings with the design team and teachers, the Learning Landscapes staff helped the school formulate the following vision and list of goals based on the school's desires and needs.

Vision:

"The B.F. Kitchen playground will be an inviting play environment focused on the health and wellness of its students and community."

Goals:

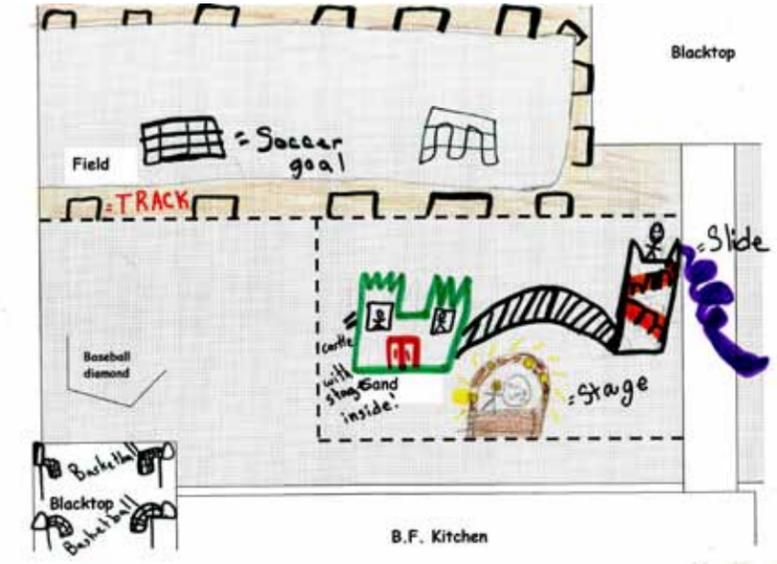
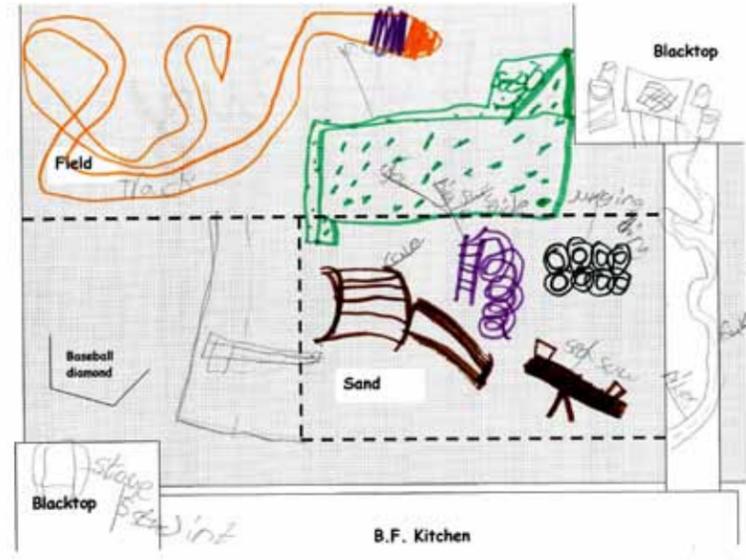
- Create an inviting, colorful, and safe environment for students and the surrounding community.
- Increase physical activity and outdoor learning.
- Offer a variety of play equipment that is appropriate for all age groups.
- Create a fully ADA accessible playground.
- Increase the amount of shade and gathering spaces to encourage positive social activity.
- Beautify the schoolyard and highlight school spirit by incorporating the white Bengal tiger mascot, school colors, student art, and other elements that students can be proud of.

Wish List:

- Regulation-sized little league baseball/ softball field for local sports leagues
- Soccer field with permanent goals for local sports leagues
- Age-appropriate equipment for Primary students
- Age-appropriate equipment for Intermediate students
- Updated play equipment with climbing walls, slides, and swings
- Educational paving elements (maps and school colors!)
- Engineered wood fiber (EWF) safety surfacing
- More trees
- Integration of community garden into science curriculum
- Quiet areas for students who need a calm environment
- Shade structure
- Outdoor classroom

Student Drawings

Early in the design process, students were asked to draw their dream playground. The variety of ideas showed the students' creativity and excitement to create a unique playground for their school. Below are some examples of these drawings.



Presented by:



B.F. Kitchen Elementary

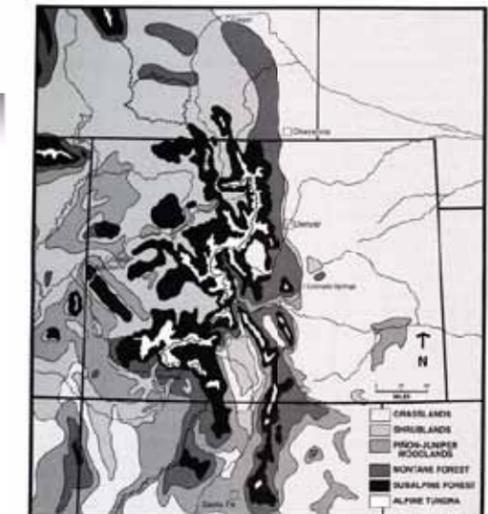
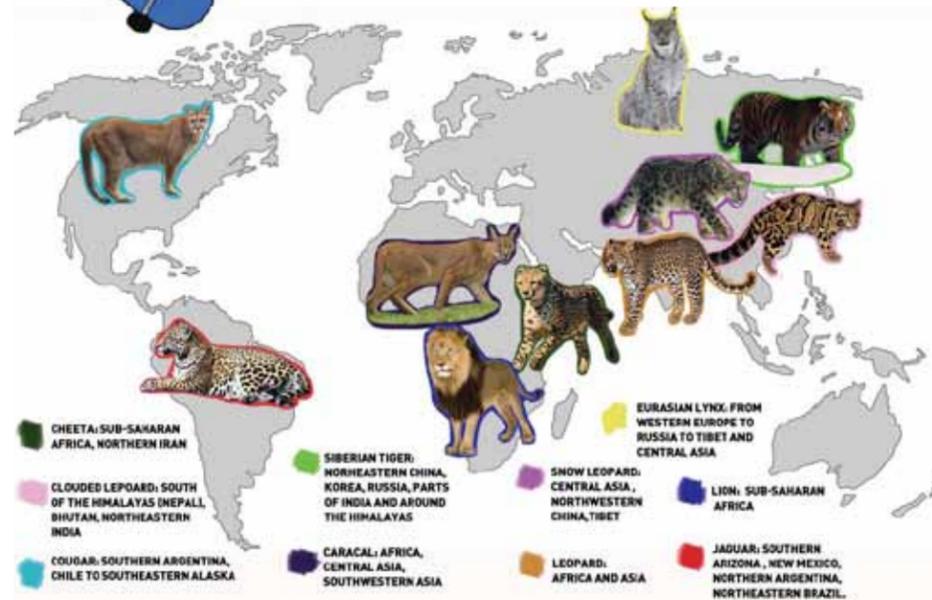
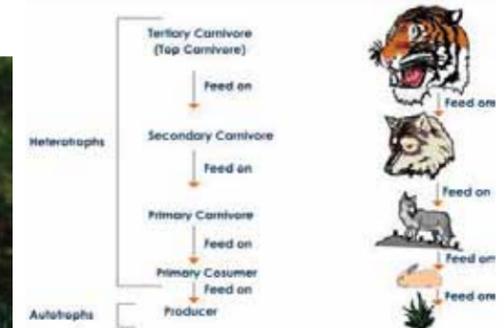
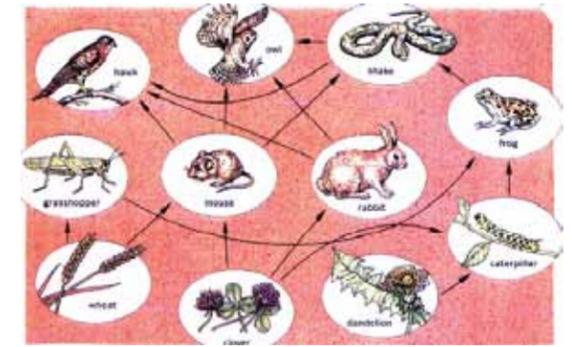
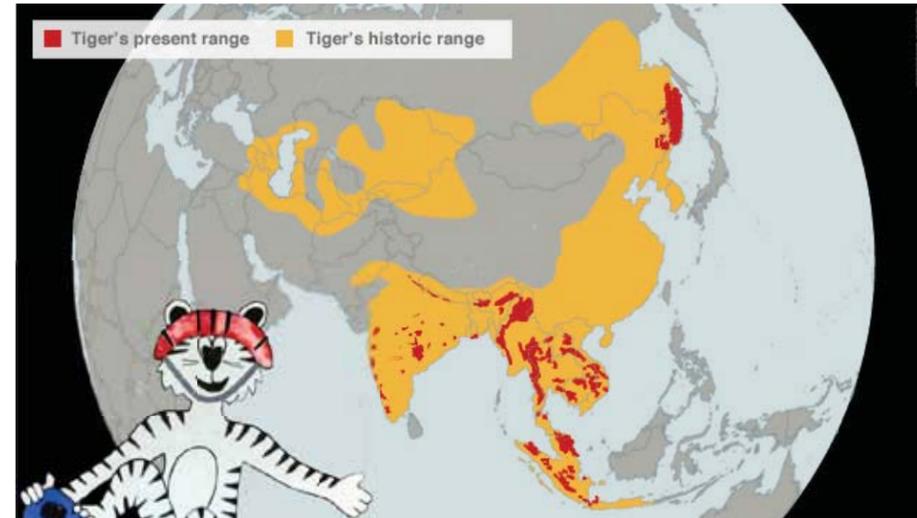
Ordering System

Ordering systems are a unique way of organizing the site in a sort of abstract way. We look at unique influences of each school and neighborhood for inspiration.

B.F. Kitchen ordering System

The B.F. Kitchen ordering system is inspired by the school's mascot, a white Bengal tiger, and by the idea of the school's health and wellness focus. At B.F. Kitchen "the entire school day emphasizes fitness and nutrition." (School Website) This philosophy can be celebrated through the design of the playground. Concepts to support this ordering system could include images of a white Bengal tiger, diagrams and artwork showing healthy foods and activities. In addition, thematic artwork and designs can be used to spark students' interest in healthy physical activities and healthy foods.

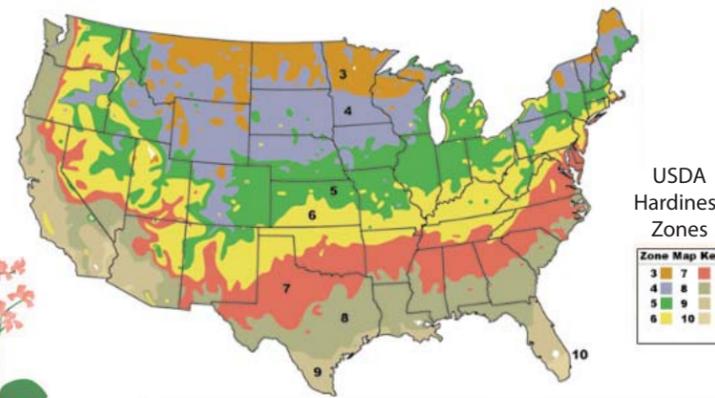
White Bengal Tiger (*Panthera Tigris Tigris*)



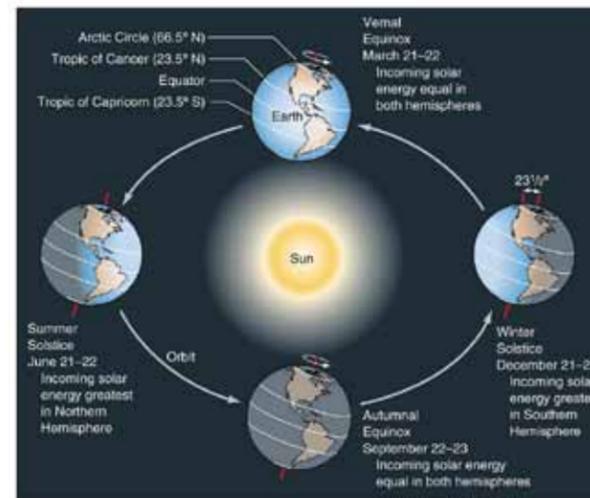
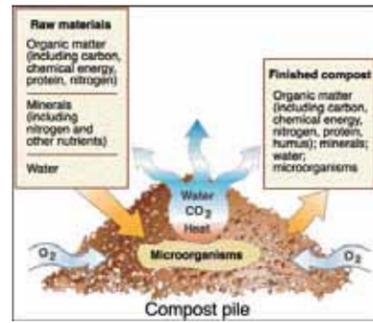
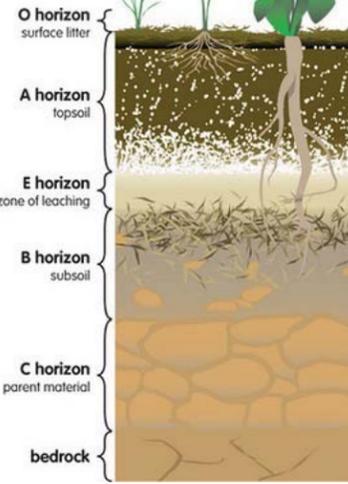
Process Graphics: The three concepts sketches were used to generate a preferred site plan based on favorable parts of each concept. The picture collages were shown to the design advisory team to generate ideas about educational elements that could fit into the overall theme of the master plan.



Colorado Produce Harvest Schedule



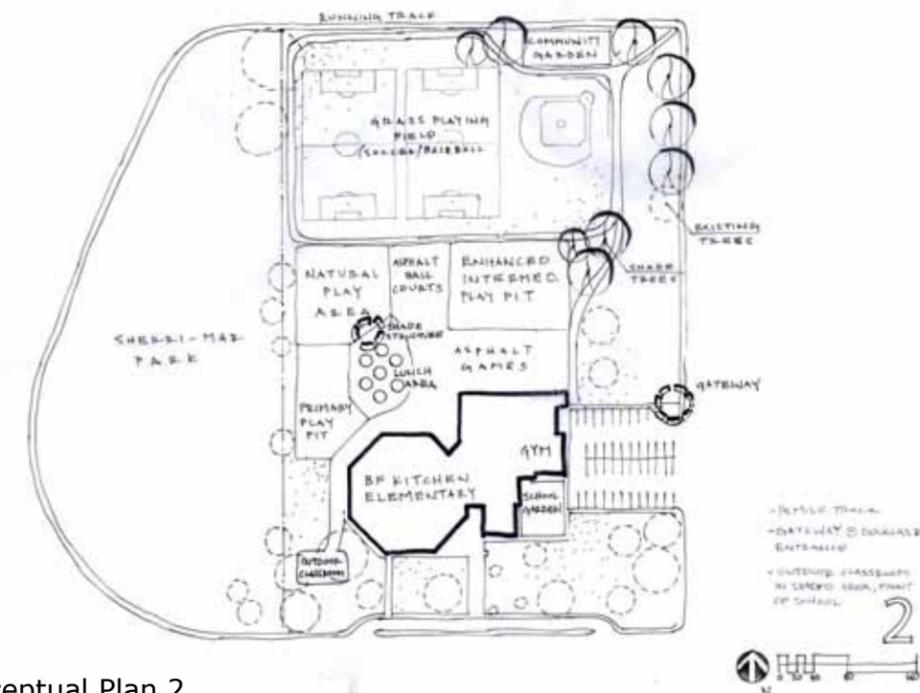
Soil Profile Diagram



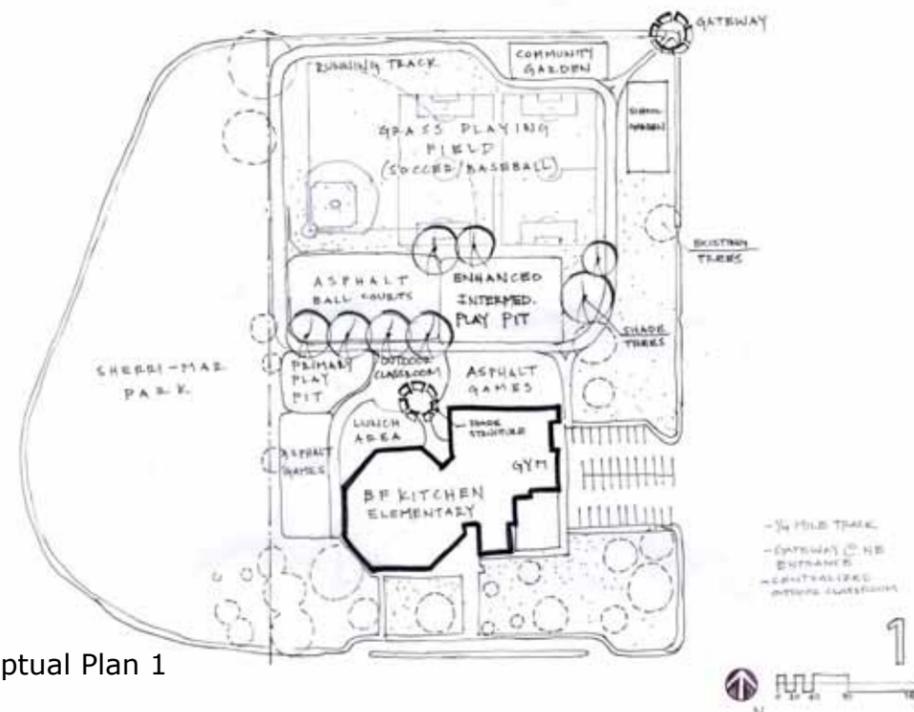
Process Graphics:

Three conceptual plans were developed by Learning Landscapes and brought to the design advisory team meetings. Each plan shows different options for the layout and placement of certain items on the team's wish list. The placement of the community gateway, outdoor classroom, shade structure, and outdoor lunch area varies slightly in between the plans.

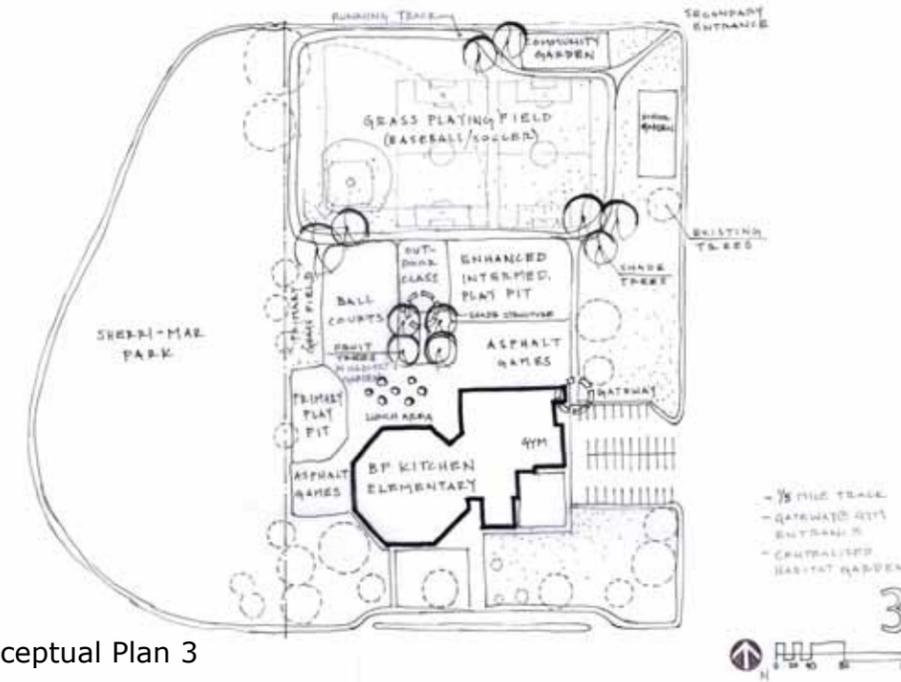
From the three concept plans, the design advisory team selected favorable parts of each to incorporate into the preferred site plan. This plan was developed based on the needs and desires of the school and its community. This master plan proposes an overall design for the playground at BF Kitchen that can be installed either all-at-once or in staggered phases to suit the funding capabilities of the school. The general idea of the proposed play ground is to provide BF Kitchen Elementary School with an inviting play environment focused on the health and wellness of its students and community.



Conceptual Plan 2



Conceptual Plan 1



Conceptual Plan 3



- Community Gateway
- Pedestrian Access to School Grounds through fence
- 1/4 -Mile crusher-fines running track
- Existing asphalt to be removed, replaced with grass (9,500 SF)
- Existing Trees to remain, typ.
- Relocated Storage Shed
- Designated Expansion Area to Remain Clear
- Student garden
- Outdoor lunch area with concrete tables on crusher fines
- Service and Maintenance Access

Key

- Hardscape
- Softscape
- Garden Area
- Engineered Wood Fiber
- Parking Area
- Snow Storage
- Proposed Trees
- Community Gateway
- 1/4 Mile Track

SCALE : NTS

B.F. Kitchen Active Play Areas Master Plan Description

B.F. Kitchen’s enthusiastic design team came up with innovative ways to show school spirit and improve learning at their school. The school currently maintains a good relationship with the community and would like to further that relationship. Described below are the proposed changes to the B.F. Kitchen schoolyard in an effort to fulfill the vision and goals developed by the design team:

1. Age-Appropriate Play Equipment

The existing play equipment at BF Kitchen is mostly old and outdated. This equipment is not appropriately suited to meet the needs of different age groups or students with special needs. The proposed plan maintains the location of the existing play structure area to keep the cost down, but divides up the large space (~14,000 SF) into areas designated for the needs of different age groups;



primary (grades K-2) and intermediate (grades 3-5). The new equipment will not only be safer than the existing structures, but challenge the students to test their coordination, balance, and strength in a colorful and alluring setting.

2. Outdoor Classroom

An outdoor classroom space was highly desired by the teaching staff at BF Kitchen. The design team chose to place the outdoor classroom near the front of the school to allow for quiet instruction separate from the active play areas behind the school. The new classroom will utilize the shade from the existing tree canopy in this location.



PREFERRED SITE PLAN
BF KITCHEN ELEMENTARY

3. New Running Path

The need for a designated running path around the school grounds was expressed by the students, staff and community. Every child has daily physical education class on account of BF Kitchen’s Health and Wellness focus. Students currently jog around the grass fields, but there is no way of measuring their distance. The proposed track will span a quarter mile and provide intervals to measure distances as well as rest areas with seats and shading to cool down. This new track will be used by the school and community during their yearly “Tiger Trample” fund-raiser.



4. Community Gateway

A community gateway acts as an entrance to the school grounds and a landmark to promote a sense of pride and identity for the students, faculty and staff. The gateway at BF Kitchen will be located at the Northwest corner of the school grounds, which is a frequently-used access point for students and the community already.



5. Shade Structure

The current play area at BF Kitchen is sorely lacking in shade. The PE instructor and her students often utilize the shade beneath the large tree on the East side of the schoolyard. A shade structure will provide an additional place to cool down on hot days, and can also promote the school’s identity through its design.



6. Expanded Asphalt with Games and Activities

Much of the ground surface of the existing schoolyard is covered in loose gravel that limits the variety of available activities. Adding an asphalt surface will enlarge the playground with colorful ball courts, games, and educational elements. The expanded play surface will allow for a more even distribution of play activities, and therefore students, throughout the grounds.



7. Baseball and Soccer Fields

The large grass field behind BF Kitchen is one of the most frequently-used areas of the playground. Soccer is a favorite recess activity for many students. Additionally, local soccer and baseball leagues use the fields for practice and games for younger age-groups. The incorporation of regulation-sized soccer and baseball/softball fields will allow BF Kitchen to host more league games, which will generate revenue for the school district through use

fees.

8. Shade Trees

There are many mature trees in the front of the school and within Sheri-Marr Park to the West, but there is almost no shade within the existing play area. Adding new trees will increase shade areas and places for students and the community to cool down on hot days. New trees will also break up the large space of the existing playground with vertical elements and the add visual interest with seasonal color change.



9. Community Garden

There is an existing community garden in the Northeast corner of BF Kitchen’s schoolyard that is operated by the Loveland Youth Gardeners. Their mission is “to cultivate skills, promote stewardship and service in young people through sustainable gardening and healthy living practices” (www.lovelandyouthgardeners.org). The master plan calls for the relocation of this garden to allow room for the new running path. The hope of the school and its faculty is to be more involved in the garden and incorporate it as a valuable teaching instrument into the science curriculum, specifically the 2nd grade’s plants unit.



10. Outdoor Lunch Area

BF Kitchen’s cafeteria also doubles as its gymnasium. It is a modestly-sized room at just over 2,000 square feet. The addition of an outdoor seating area for students to eat lunch on nice days will take some of the strain off of the small cafeteria and allow students to enjoy their meal in fresh air. This space will be located just outside the cafeteria/gym door for easy observation by staff. The design of this area will incorporate a crusher-fines surface with vandal-resistant tables made of stone or concrete.



Presented by:



B.F. Kitchen Elementary

Section Four

4



- Cost Estimate
- Resources
- Acknowledgements
- Master Plan Poster



Presented by:



B.F. Kitchen Elementary

BF Kitchen K- 5 - Active Play Areas Master Plan - Cost Estimate

OPTION 3: Track+Garden+Play Area+Courts+Fields

This option includes removal of the existing asphalt pad, addition of a crusher fines track w/ trees and boulder seating, adding asphalt and some striped games to the gravel area now occupied by the bike rack and new asphalt and enlarged basketball courts in the area now occupied by the funnel ball poles. It also includes a community gateway, new swings and new primary and intermediate play equipment, an outdoor classroom and a shade structure. This option also includes installation of a regulation baseball/softball field and grass installation in the gravel area around the existing backstop.

Category	Unit	Unit Cost	Quantities	Total Cost
Play Equipment , Structures & Surfacing				
Play Equipment				
Climbing Structures	LS	\$5,000.00	1 \$	5,000.00
Primary Play Equipment installed	LS	\$30,000.00	1 \$	30,000.00
Intermediate Play Equipment installed	LS	\$30,000.00	1 \$	30,000.00
Swings (3 bay 6 seat) (Pending final costs)	LS	\$4,000.00	2 \$	8,000.00
SUBTOTAL				\$ 73,000.00
Play Surfacing (12" EWF Delivered/Installed)				
Intermediate Play Area	SF	\$2.50	14,100 \$	35,250.00
SUBTOTAL				\$ 35,250.00
4' Chain Link Fence @ Swings	LF	\$20.00	100 \$	2,000.00
Concrete & ADA Accessibility				
Concrete Flatwork- 6" depth	SF	\$4.00	900 \$	3,600.00
Concrete mow band, 8"x6"	LF	\$5.00	0 \$	-
Concrete Curbwall @ play pits	LF	\$20.00	0 \$	-
Concrete Ramp at Play Pits	EA	\$800.00	2 \$	1,600.00
Concrete Stairs	LF	\$37.00	0 \$	-
SUBTOTAL				\$ 5,200.00
Site Work				
Asphalt Striping and painting				
Earthwork and Drainage	LS	\$25,000.00	1	\$25,000
New Asphalt, 4" depth	SF	\$1.80	25,000 \$	45,000.00
Seal Existing Asphalt	SF	\$0.95	12,400 \$	11,780.00
Outdoor Classroom	EA	\$5,000.00	1 \$	5,000.00
Outdoor Lunch Area	EA	\$5,000.00	1 \$	5,000.00
Map Striping	EA	\$1,500.00	1 \$	1,500.00
Tetherball Striping	EA	\$150.00	6 \$	900.00
Hopscotch Striping	EA	\$100.00	2 \$	200.00
Baseball Infield and Bases	EA	\$1,500.00	1 \$	1,500.00
Basketball Court Striping	EA	\$400.00	2 \$	800.00
4-Square Striping	EA	\$125.00	8 \$	1,000.00
Funnel Ball Striping	EA	\$200.00	1 \$	200.00
Painted Line-Up Lines	LS	\$100.00	6 \$	600.00
Painted Goal Posts	EA	\$50.00	4 \$	200.00
SUBTOTAL				\$98,680

BF Kitchen K- 5 - Active Play Areas Master Plan - Cost Estimate

Running Track				
Crusher Fines, 4' WIDE X 4" depth	SF	\$1.00	4,200 \$	4,200.00
Crusher Fines Stabilizer	SF	\$1.20	4,200 \$	5,040.00
Concrete Curb	LF	\$5.00	2,000 \$	10,000.00
*Shade Tree, 3" caliper (*donated, =\$8,000)	EA	\$400.00	20 \$	-
Boulder-field	EA	\$150.00	12 \$	1,800.00
SUBTOTAL				\$ 21,040.00
Site Furnishings, Athletic Equipment and Misc.				
Picnic Table	EA	\$1,000.00	2 \$	2,000.00
Trash Receptacle	EA	\$650.00	3 \$	1,950.00
6' Bench	EA	\$850.00	4 \$	3,400.00
Banner Pole and Banners	EA	\$900.00	3 \$	2,700.00
Basketball Goal	EA	\$1,200.00	4 \$	4,800.00
Tetherball Poles	EA	\$350.00	6 \$	2,100.00
Permanent or Moveable Soccer Goals	EA	\$1,000.00	2 \$	2,000.00
Backstop with Hood	EA	\$2,500.00	1 \$	2,500.00
Shade Structure @ Plaza	EA	\$25,000.00	1 \$	25,000.00
Community Gateway	LS	\$8,000.00	1 \$	8,000.00
SUBTOTAL				\$ 54,450.00
Gardens, Planting and Irrigation				
Shrub Bed Soil Prep	SF	\$0.30	400 \$	120.00
Sod and Soil Prep @ field and play areas	SF	\$0.55	32,180 \$	17,699.00
Irrigation, shrub beds	SF	\$0.75	400 \$	300.00
Irrigation, sod areas	SF	\$0.55	32,180 \$	17,699.00
Irrigation, tree bubblers	EA	\$60.00	40 \$	2,400.00
Shredded Mulch, 4" depth	SF	\$1.20	400 \$	480.00
SUBTOTAL				\$ 38,698.00
Community Vegetable Garden				
Soil Amendment	CY	\$35.00	15 \$	525.00
Concrete mow band, 8"x6"	LF	\$5.00	285 \$	1,425.00
4' Chainlink Fence	LF	\$20.00	285 \$	5,700.00
Chain Link Gate, 4' width	EA	\$350.00	1 \$	350.00
Irrigation	EA	\$1,500.00	1 \$	1,500.00
Compost Storage & Accessories	EA	\$1,000.00	1 \$	1,000.00
SUBTOTAL				\$ 10,500.00
Site Improvements Total				\$ 338,818.00
Project Start Up				
Typical construction mobilization		\$10,000.00		\$10,000
Infrastructure				
Typical infrastructure construction/repair		\$10,000.00		\$10,000
Demolition				
Typical Demolition		\$25,000.00		\$25,000
Architecture Engineering and Coordination				
12% of construction cost		\$40,658.16		\$40,658.16
Contingency Cost				
10% of construction cost		\$33,881.80		\$33,881.80
Project Grand Total				\$ 458,357.96

Resources

National Center for Health Statistics,
 National Survey of Children’s Health, 2003–2007,
 Centers for Disease Control and Prevention.
 Health at a Crossroads
 2010 Supplement to the Colorado Health Report Card –
 Colorado Health Foundation
 Commerce City Press RELEASE February 5, 2011

Acknowledgements:

Colorado Health Foundation
 Staff, students and parents at:
 BF Kitchen Elementary School
 Thompson R2-J District Administration
 Thompson R2-J District Facility Maintenance
 Thompson R2-J District Wellness
 University of Colorado Denver
 Recreation Plus

University of Colorado Denver
 College of Architecture and Planning

 Colorado Center for Community Development

 Learning Landscapes

 Professor Lois Brink
 Executive Director

 Cate Townley
 Community Outreach Coordinator

 Chris Schooler
 Senior Research Associate

 Graduate Student Interns:
 Patrick Healy
 Chad Reischl



Presented by:



B.F. Kitchen Elementary