<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>section 1</strong></td>
</tr>
<tr>
<td>Executive Summary</td>
</tr>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Adams 14 Background</td>
</tr>
<tr>
<td>Intent &amp; Process</td>
</tr>
<tr>
<td>Recommendations</td>
</tr>
<tr>
<td>Learning Landscapes Background</td>
</tr>
<tr>
<td><strong>section 2</strong></td>
</tr>
<tr>
<td>School Background</td>
</tr>
<tr>
<td>Existing Conditions</td>
</tr>
<tr>
<td>Playground Assessment</td>
</tr>
<tr>
<td><strong>section 3</strong></td>
</tr>
<tr>
<td>Design Advisory Team</td>
</tr>
<tr>
<td>Vision, Goals, Wish List</td>
</tr>
<tr>
<td>Ordering System</td>
</tr>
<tr>
<td>Master Plan</td>
</tr>
<tr>
<td><strong>section 4</strong></td>
</tr>
<tr>
<td>Cost Estimate</td>
</tr>
<tr>
<td>Resources</td>
</tr>
<tr>
<td>Acknowledgements</td>
</tr>
<tr>
<td>Master Plan Poster</td>
</tr>
</tbody>
</table>
Executive Summary

- Introduction
- Adams 14 Background
- Master Plan Intent and Process
- Recommendations
- Learning Landscapes Background
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.

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.
In January 2011 the Adams County School District 14 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 seven elementary school Active Play Area Master Plans.

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.

Healthy Schools & Healthy Communities

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.

The Foundation’s seven Funding Strategies are:

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.

Numeric milestones used to gauge progress toward the Foundation’s goals.

The 12 Measurable Results are:

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 underserved Coloradans who have convenient access to recreational exercise and fruits and vegetables.
Adams County School District 14

Adams 14, located in Commerce City, is Colorado’s 23rd largest school district, serving nearly 7,000 students and 33,000 residents annually. Adams 14 strives to ensure academic success for every student by providing highly effective classroom instruction, supplemental enrichment opportunities and parent/family collaboration opportunities.

Commerce City is a highly-industrialized community bisected by industry and busy roadways, with limited walkable and accessible play spaces. Schools and neighboring communities become little “islands” unto themselves, establishing a premium on available areas to play and recreate.

The Adams-14 community has a high population of low income residents with 82 percent of students in the district qualify for free or reduced lunch. Additionally, 81 percent of students are Hispanic, with 57 percent identifying Spanish or another language as their primary language.

Total Enrollment 6,702  
77% Hispanic  
18% Anglo  
3% African American  
2% American Indian

Hispanic children in Colorado are three times more likely to be obese, further emphasizing the importance of providing quality play spaces.  
(Colorado Health Report Card)

We learn, we move, we enjoy healthy foods, it is part of who we are!

Wellness

Adams 14 schools are engaged in a number of wellness initiatives, including school gardens, youth farmers’ markets, the flat fourteeners running program and serving healthier cafeteria foods. Adams 14 decision makers believe that healthy students are healthy learners. The District is developing a culture of school wellness and active play areas.

Increasing physical activity not only aligns with the District’s Wellness initiatives but with the surrounding community’s as well. Commerce City is one of 16 Colorado municipalities recognized by the White House as a “Let’s Move City,” for its ability to promote and provide services that reduce childhood obesity.

“Commerce City believes in promoting the health and well-being of all residents by offering services and amenities that promote an active lifestyle,” said Mayor Paul Natale. (Commerce City Press Release February 5, 2011)
Existing Challenges
Adams County School District 14 is an urban school district facing challenges common to other urban districts. The infrastructure is aging – the average facility age is over 50 years - and maintenance funding is limited leaving little if any budget available to improve schoolyards and play areas. Several Physical Education teachers and District Administrators have commented on the lack of play areas and equipment available for their students to be active. They have shared observations of students sitting around at recess and after school because they lack quality equipment and active play areas. The Adams 14 operations team agrees that the District’s playgrounds and active play areas are the most neglected of all initiatives, due to lack of funding. Most A-14 elementary schools require moderate to extensive renovations or upgrades to meet adequate playground standards. These include replacing playground equipment, providing American with Disability Act [ADA] accessibility, and providing an outdoor classroom learning environment. Playgrounds lacking appropriate choices for children tend to become arenas for bullying and teasing. Recess should be a positive experience that compliments academic development, a place where children develop their emotional, physical and social skills.

In 1997 the District updated play equipment at several school sites. The equipment installed during this time consisted of one play space for all age groups at each school. Although these spaces were designed to be appropriate for ages 5-12, there is a lack of physically challenging equipment for intermediate students. In addition, updates made to play spaces in 1997 predated the expansion of Adams 14’s early childhood programs. Thus, amendments and improvements to play facilities do not accommodate the District’s youngest learners.

As a consequence, Adams 14’s playgrounds are grossly underserved preschool students with outsized, outdated and often unsafe equipment.

Related Efforts and Integration
In spring 2010 the District worked with consultants H+L Architecture to develop a district-wide facilities master plan. The Comprehensive Facilities Master Plan focuses on the conditions of building and the interior of the schools. The two master planning projects complement each other well and provide the school district with a comprehensive facility and grounds plan.

The Comprehensive Facilities Master Plan lists 3 major Educational Planning Goals to direct improvements. Implementation of the Active Play Areas Master Plan will specifically help to reach Goal #3 for Neighborhood Schools.

Goal 3: Neighborhood Schools
Intent: Providing structures that encourage school-community connections.

- Welcoming architecture
- Safety and security
- Respect pride in neighborhood schools
- Student engagement
- Parents/community
- Curb appeal
- Early Childhood Center (age-appropriate equipment and safety)

Schoolyards have the ability to provide a safe welcoming space for students and community, raise neighborhood pride, and provide curb appeal for the school.
**Intent of the Master Plan**
The master plan is intended to serve as a roadmap for proactively developing strategies and tactics needed to develop sound, safe and active play areas that are proven to increase activity for its students and surrounding community members. The purpose of the master plan is for A-14 to be strategically poised to capture opportunities to improve and expand play areas as they become available. The A-14 Active Play Areas Master Plan is intended as a tool for schools, parents, and district administration to seek funding for future schoolyard renovations and wellness initiatives.

The 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, each 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.

**Planning Process**
The Master Plan process took place from February to June 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 Grants and communication office, the Wellness Coordinator, 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 schoolyard improvement committees and facilitated by Learning Landscapes staff. The schoolyard committees were generally comprised of the principal, PE teacher, and pre-k teacher, members of the school’s wellness team, parents, and teachers. The team members helped to identify issues with the existing sites, formed a vision and goals to guide the planning process, gathered information and feedback from people outside the committee, provided feedback on iterations of the plan, administered photo surveys and collected student art work.

This two-tiered collaborative effort allowed the individual schools to develop a schoolyard master plan to reflect the history, culture and curriculum unique to each school and at the same time aligned the needs of the individual school with those of the District.
Recommendations
Improved play facilities will serve multiple purposes in not only engaging Adams 14 students, but also the entire community. The following are recommendations for implementation of the Active Play Areas Master Plan at each Adams-14 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 Running Tracks and Walking Paths
  - To provide opportunities for students, teachers, staff and community to track their distance and encourage each other to get moving.

- 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 interactive elements
  - At each school, the design committees requested more color on the schoolyard. Students are excited by the color and it sparks their creativity during play.

- Install Vegetable Gardens
  - To promote healthy eating, community stewardship, educational opportunities, and food literacy.

- Develop Outdoor Learning Environments
  - Spaces for teachers to bring students outside and to practice inquiry and to interact with the landscape as an educational system

- Develop Community Gathering Spaces
  - Welcoming the neighborhood to gather, play, and exercise in these public areas will help build support stewardship of the community. It is important for the students to have a safe place to be active not just during recess but also after school and on the weekends.

- Increase Opportunities for Shade
  - To protect students and visitors from the intense Colorado sun and to provide additional gathering spaces for community members. The following are recommendations for implementation of the active play areas master plan at each Adams-14 elementary school.
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 feed back 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.
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.

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.
Section Two

- School Background
- Existing Conditions
- Playground Assessment
School Background

Location and History
Monaco Elementary school is located at 76th and Monaco St., in a residential area residential just north of Commerce City in unincorporated Adams County, CO. The schools was originally constructed in 1956 as an elementary school and in 2008 additional classrooms were added to the southwest side of the school as part of an expansion. The total site is approximately 7.5 acres, with the boundaries of the site being Monaco Street to the east, 76th Avenue to the south, residential homes to the west, and a closed-off street bordered by Urquidez-Centennial park to the north.

Monaco's curriculum is focused on math and reading and staff encourage students to engage in outdoor learning. The school mascot is a mustang and the school colors are royal blue and gold. As of Spring 2011 the enrollment was 483 students. According to the District’s 2010 Facilities Master Plan, projected enrollment in 2012 will exceed the capacity of Monaco Elementary by over 100 students.

Neighborhood Context
The neighborhood around Monaco is mostly comprised of single-family detached housing on small neighborhood streets. The school and the adjacent Urquidez-Centennial Park offer the only playground and open spaces in the neighborhood. The school invites the surrounding community to be involved in school activities such as an annual back to school barbecue and field day.
School Mission

“Monaco Elementary is committed to providing all students with a high quality education with an emphasis on student engagement, instructional differentiation, and instructional complexity. Our staff members are dedicated to improving student achievement and having a positive impact on each and every one of their students.” (School Web site).

School Demographics

Spring 2011 Enrollment: 483 students

Male Students: 247
Female Students: 236

Free/Reduced Lunch: 91% of students
English is not primary language: 55% of students

Racial Make-up of Students:
Hispanic: 74%
White: 22%
African American: 13%
American Indian or Alaska Native: 0.1%
Asian or Pacific Islander: 2%

Grade Distribution of Students:
Preschool: 35
Kindergarten: 73
1st grade: 87
2nd grade: 71
3rd grade: 77
4th grade: 73
5th grade: 67

Surrounding Area Demographics

As of the 2010 Census there were approximately 4,025 people living in the area surrounding the school, with about 92% of housing units occupied. According to the 2005-2009 American Community Survey estimate, the median annual household income for residents within the Adams 14 School District was $41,382, and 68% of units were owner-occupied compared to 32% rented.

Surrounding Area Demographic Breakdown

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino</td>
<td>65%</td>
</tr>
<tr>
<td>White</td>
<td>32%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>0%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: 2010 Census (census tract 88.01, block groups 2 & 3)

Catchment Area

Monaco draws students from approximately 0.7 square mile geographical area contributing to a high percentage of students that walk to/from school. The attendance boundaries are Colorado Highway 2 to the east, 72nd Ave to the south, 80th Ave to the north, and railroad tracks to the west. Physical barriers in and out of the area such as a busy highway, railroad tracks and a disconnection from the N-S street grid, hinder vehicle access to the school. However, pedestrian and bicycle connection to the school from the catchment area is adequate.

2010 Monaco Elementary Demographic Breakdown

Source: 2010 Census (census tract 88.01, block groups 2 & 3)
Site Inventory

Existing Conditions:

Equipment & Materials
The Monaco Elementary playground is located on the north and west sides of the school and is comprised of a well defined large grass area with two softball/baseball fields, an asphalt play area with multiple four-square and hopscotch games, and three play structure areas. The large grass field is where majority of the students play soccer and other organized sports during recess.

ADA Accessibility
A majority of the building entrances are ADA accessible. Multiple play structures on the site are not ADA accessible due to lack of ramps into play pits and lack of appropriate structures for special needs students. The primary play pit to the southwest has exposed curbs that could be difficult for a wheelchair to overcome. A majority of the play structure areas have ADA accessible engineered wood fiber surfacing. One exception are the swings located on the north side of the schoolyard that have non-ADA compliant pea gravel.

Drainage
In general the site drains away from the school to the west. Three roof drain outlets are located in the sloped asphalt area draining water toward the grass field. Both the grass field and the asphalt have adequate drainage with the exception of a few problem areas. Leaky gutters cause ice build up on the sloped asphalt play area due to sheet flow drainage and freeze/thaw. The asphalt areas located along north side of the school building tend to build up ice after snow events due to freeze/thaw. The grass area at the base of the sloped asphalt including the baseball backstop has a tendency to become muddy due to the amount of water flowing here from the asphalt surface and roof drains.

Circulation and Site Accessibility
Monaco has one primary entrance into the school that is at the front door located on Monaco street. The school ground has pedestrian access points for students and parents along the south and west corners of the property and from the parking lot on the north side of the property. These entrances are not very visible and need proper signage. The entrance to the west has a large step up that needs to be addressed for safety reasons. The entrance from the parking lot on the north is not paved and tends to get muddy and icy during weather events. Recess is accessed from individual classrooms.
Vehicular access is sufficient but student drop off could be revised and made more efficient. Faculty members sometimes have trouble keeping track of incoming students in the morning because of multiple drop-off points. The bus drop-off/pick-up is a parallel pull-off lane on Monaco St. Deliveries and service vehicles are coupled with the parking lot on the south side of the building. A gated fire access road is located north of the school off Monaco St.
Safety
Issues of safety were addressed by the design team during the meetings:
  - The asphalt play area has an unsafe slope for active play.
  - The pre-k play area is not fenced making supervision difficult.
  - The pre-k play area does not have age appropriate pay equipment.
  - Gravel from swings area gets on to the walkways creating a tripping hazard.
  - The pedestrian entrance on the southwest side of the property has a large concrete drop off creating a tripping hazard and is not ADA accessible.
  - The modular building on the north side of the school acts as a visual barrier to the play equipment making supervision difficult.
  - Ice build-up on asphalt areas create slipping hazards.
  - The marquee at the front of the building is too low causing students to bump their heads.

Parking
Monaco has two parking lots one on the north end of the site that holds 42 vehicles and on the south that holds 38 vehicles with 4 handicap spots. During pickup and drop off hours, parents park along the surrounding streets causing congestion in the area. School staff reported that they had enough spots for parents to attended PTA meetings without having parking issues. The south parking lot is used for service access and deliveries to the school.

Maintenance
The entire schoolyard is equipped with an irrigation system, the grass fields and existing trees and shrubs are well maintained. Mixing of play area safety surfacing poses as a maintenance issue with gravel from the swing pit mixing with engineered wood fiber making wheelchair access difficult.

Existing Vegetation Conditions
Monaco’s grass fields are maintained by the Adams School District 14 service center. The grass is in good condition with very few weeds. The site has few mature trees in the playground area. Most of the mature trees and landscaping are located in the front of the building along Monaco St. and in the play area to the north of the school.
The Monaco Elementary playground is located on the north and west sides of the school and is comprised of a large grass area with two softball/baseball fields, an asphalt play area with multiple four square, tetherball and hopscotch, one basketball court and three play structure areas. The grass area located to the west of the school building is primarily used for soccer.

The first play area is located in the southwest area of the schoolyard near the primary age group classrooms. This area consists of one large play structure installed in 2006 with engineered wood fiber surfacing underneath. The existing equipment in this area is in good condition and is intended for students age 5-12 although features such as the swings and monkey bars are too high for safe primary-age play. It was also noted that some of the steps leading up to the shade structure are too far apart for primary age students. The equipment itself is considered ADA accessible and has ADA compliant safety surfacing but there is a large curb and no ramp into the play pit.

The second play area is located in the northeast corner of the site. This area is closest to the Pre-K and Intermediate age classrooms. The equipment this area was installed in 1998 is in good condition and has with engineered wood fiber surfacing underneath. The equipment is considered ADA accessible but there is currently no ramp into the play pit. Although the equipment is intended for students age 5-12, intermediate age students are not challenged by the equipment features. This equipment also serves the Pre-K students but the area is not fenced making supervision difficult. The Pre-K area will need additional items such as fencing, a sandbox and a shade structure to meet state licensing requirements.

The third play area, located north of the modular building next to the Intermediate/Pre-K play equipment, consists of two sets of antiquated metal swings. Both swing sets have non-ADA compliant pea gravel underneath. The pea gravel from the swings mixes with the engineered wood fiber under the play structure and causes uneven compression and breakdown of wood fiber.

None of the play structures currently have signage to indicate the appropriate age groups for use. Overall the play areas do not contain enough appropriate features for special needs students.
Section Three

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

The playground design advisory team played a critical role in creating the Monaco Elementary Active Play Areas Master Plan. The design team was made up of the Principal, Health Clerk, P.E teacher, Pre-K teacher, a parent teacher liaison and staff members. Attendance to each meeting varied based on staff availability.

The team met throughout the master planning process to discuss issues, concerns, desires and other important information regarding the schoolyard. At each meeting various scenarios, proposals, and questions were brought to the table and input from the team helped to refine the vision, goals and layout of the master plan. Monaco Elementary’s enthusiastic design team came up with innovative ways to show school spirit and improve learning at their school.

Constituent Issues, Needs, and Desires

Issues
- Lack of age appropriate play equipment for primary and Pre-K age groups.
- The play equipment is too far from the primary classrooms.
- Area behind modular is difficult to supervise during recess.
- There is no shade on the playground.
- Gravel from the playground travels onto the asphalt and the sidewalks creating safety issues.
- Students hitting their heads on the Marquee in front of the school.
- Paved area gets very hot in warm months.
- Safety issues with the sloped area of the asphalt.
- Balls roll into street from northeast play area.
- Safety surfacing under swings gets kicked away creating a maintenance and safety issue.

Needs
- A dedicated fenced pre-k play area near pre-k classroom.
- Adjust heights on primary play equipment on the playground.
- A shade structure or additional trees to provide shade for students and teachers during recess.
- Promote healthy eating and active living at school.
- Maximize play space for soccer and other organized recess activities.
- The paved Fire Access lane leading into the site from Monaco St. must be kept clear of obstruction.
- Address sloped asphalt area.

Desires
- More asphalt games to cover the large area and give students more options during recess.
- Increase literacy, and math educational elements on playground.
- Develop a buffer around the school marquee to keep students from running into it.
- Create a walking path around the schoolyard.
- Add a vegetable garden to promote healthy eating at school.
- Seating for parents to watch children on the weekend.
- Add a spider-web climbing structure to promote physical activity.
- Develop the playground as a positive community focal point.
- Line up symbols (turtle for 1st graders, eagle for 2nd etc.)
- Rubberized mats under swings to prevent surfacing from diminishing.
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 Monaco playground will be a stimulating play environment focused on recreation, education, 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 mustang mascot, school colors, student art, and other elements that students can be proud of.

Wish List

- Fenced pre-k play area with age appropriate equipment
- Soccer field with permanent goals
- Age-appropriate equipment for Primary students
- Age-appropriate equipment for Intermediate students
- Climbing equipment (spider)
- Educational paving (maps and school colors!)
- Fitness course (ex: Rose Hill)
- Rubber turf (swings dig holes in mulch)
- More shade structures (over pre-k area)
- Area for community (back to school bbq)
- More trees
- Funnel ball
- Community garden
- Additional seating
- Shade structure
- Pavement graphics to aid in play time organization

Student Wish List

The "Wordle" below represents elements students would like to see in their playground based on drawings of their dream playground. The bigger the word, the more frequent the element was represented in the students drawings.
Ordering Systems
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. As such, the ordering systems tend to become an abstraction that unifies a number of different influences and can act as a philosophical manta of sorts. In some cases the ordering systems might be interpreted literally in other cases they remain a thematic device. Either way, the ordering systems are an important part of a Learning Landscape and can offer the whimsy and inspiration that these sites and their users desire by keeping ideas fresh and fun.

Monaco ordering System
The Monaco ordering system is inspired by the school’s mascot, a mustang, and by the idea of connection and teamwork. At Monaco "Everybody is involved and connected to each other, including parents and members of the community, to identify problems and work on solutions." (School Web site) This philosophy can be celebrated through the design of the playground.

Concepts to support this ordering system could include images of a mustang, diagrams and artwork showing connectedness such as webs, puzzles, mathematical diagrams. In addition, thematic artwork and designs can be used to spark student’s interest and learning opportunities related to math, science, and literacy.
Presented by: Monaco Elementary

Legend - Key of Uses

- Hardscape
- Softscape
- Garden Area
- ECE Play Area
- Primary Play Area
- Intermediate Play Area
- Parking Area
- Circulation
- Doors
- Proposed Trees
- Community Gateway

**MONACO ELEMENTARY**

**Proposed Trees**

- **Community Gateway**
- **Hardscape**
- **Softscape**
- **Garden Area**
- **ECE Play Area**
- **Primary Play Area**
- **Intermediate Play Area**
- **Parking Area**
- **Circulation**
- **Doors**
- **Proposed Trees**
- **Community Gateway**

**Legend - Key of Uses**

- Vegetable Garden: 5,500 sq ft
- 3,800 sq ft
- 5,000 sq ft
- 22,000 sq ft
- 17,850 sq ft
- 17,200 sq ft
- 1,800 sq ft
- Additional seating

- Vegetable Garden
- Outdoor Classroom & Shade Structure
- Expanded primary play area with appropriate equipment
- Swing Pit
- Scaled-down field
- Habitat Garden
- Outdoor Classroom & Shade Structure
- 1/8 Mile Track with Fitness Course & Seating
- New fenced Pre-K play pit
- Expanded Intermediate play with appropriate equipment
- Additional seating
- Map
- Monaco sign
- Baseball Field
- 25

Master Plan

2011 University of Colorado at Denver

Monaco Elementary
Monaco Master Plan Description
The Monaco Active Play Areas Master Plan was developed based on the needs and desires of the school. The school currently maintains a good relationship with the community and would like to further that relationship by hosting community events near play areas with shaded seating areas. The school mascot, the mustang, is very important to Monaco's identity. The design team would like to incorporate this icon themed in blue and gold as much as possible.

Described below are the proposed changes to the Monaco schoolyard in an effort to fulfill the vision and goals developed by the design team.

1. New Play equipment with ADA accessibility
   a. A new fenced pre-k play area installed near the pre-k modular building structure.
   b. Expand the primary play area with additional swings.
   c. A Spider Climbing structure to encourage physical activity
   d. Age-appropriate and challenging play equipment for intermediate students.

2. Walking path around the grass fields made of crusher fines.

3. Asphalt games and graphics for classroom line up.

4. Shade structure and shade trees

5. Additional seating for community use and social gathering.

6. Community garden

7. Community gateway
Section four

- Cost Estimate
- Resources
- Acknowledgements
- Master Plan Poster
<table>
<thead>
<tr>
<th>Category</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Quantities</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Play Equipment, Structures &amp; Surfacing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE Sandbox w/ sand</td>
<td>LS</td>
<td>$2,000.00</td>
<td>1</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>ECE Sandbox cover</td>
<td>LS</td>
<td>$40.00</td>
<td>1</td>
<td>$40.00</td>
</tr>
<tr>
<td>Climbing Structures</td>
<td>LS</td>
<td>$5,000.00</td>
<td>1</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Cool Topper</td>
<td>LS</td>
<td>$3,400.00</td>
<td>1</td>
<td>$3,400.00</td>
</tr>
<tr>
<td>ECE Rec Plus - Play Equipment</td>
<td>LS</td>
<td>$26,000.00</td>
<td>1</td>
<td>$26,000.00</td>
</tr>
<tr>
<td>ECE Swings</td>
<td>LS</td>
<td>$5,000.00</td>
<td>1</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Intermediate Play Equipment</td>
<td>LS</td>
<td>$35,000.00</td>
<td>1</td>
<td>$35,000.00</td>
</tr>
<tr>
<td>Primary Play equipment Installed</td>
<td>LS</td>
<td>$35,000.00</td>
<td>1</td>
<td>$35,000.00</td>
</tr>
<tr>
<td>Swings (3 bay 6 seat)</td>
<td>LS</td>
<td>$4,000.00</td>
<td>1</td>
<td>$4,000.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$114,440.00</td>
</tr>
<tr>
<td><strong>Play Surfacing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EWF @ Primary Play Pits delivered/installed/12&quot;</td>
<td>SF</td>
<td>$2.50</td>
<td>3,866</td>
<td>$9,665.00</td>
</tr>
<tr>
<td>EWF @ Intermediate Play Pits delivered/installed/12&quot;</td>
<td>SF</td>
<td>$2.50</td>
<td>5,000</td>
<td>$12,500.00</td>
</tr>
<tr>
<td>EWF @ ECE Play Pits delivered/installed/12&quot;</td>
<td>SF</td>
<td>$2.50</td>
<td>5,513</td>
<td>$13,782.50</td>
</tr>
<tr>
<td>EWF @ Swing Pits delivered/installed/12&quot;</td>
<td>SF</td>
<td>$2.50</td>
<td>1,800</td>
<td>$4,500.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$40,447.50</td>
</tr>
<tr>
<td><strong>Concrete &amp; ADA Accessibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Seat-Wall</td>
<td>LF</td>
<td>$20.00</td>
<td>0</td>
<td>$20.00</td>
</tr>
<tr>
<td>Concrete Flatwork- 6&quot; depth</td>
<td>SF</td>
<td>$4.00</td>
<td>0</td>
<td>$4.00</td>
</tr>
<tr>
<td>Concrete move bow, 8&quot;x6&quot;</td>
<td>LF</td>
<td>$11.00</td>
<td>0</td>
<td>$11.00</td>
</tr>
<tr>
<td>Concrete Curtwall @ play pits</td>
<td>LF</td>
<td>$20.00</td>
<td>850</td>
<td>$17,000.00</td>
</tr>
<tr>
<td>Concrete Pan</td>
<td>SF</td>
<td>$5.00</td>
<td>0</td>
<td>$5.00</td>
</tr>
<tr>
<td>Concrete Ramp at Play Pits</td>
<td>EA</td>
<td>$900.00</td>
<td>3</td>
<td>$2,700.00</td>
</tr>
<tr>
<td>Concrete Stairs</td>
<td>LF</td>
<td>$37.00</td>
<td>0</td>
<td>$37.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$40,447.50</td>
</tr>
<tr>
<td><strong>Site Work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earthwork and Drainage</td>
<td></td>
<td></td>
<td>1</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>New Asphalt, 4&quot; depth</td>
<td>SF</td>
<td>$2.50</td>
<td>5,100</td>
<td>$12,750.00</td>
</tr>
<tr>
<td>Reconditioned seal existing</td>
<td>SF</td>
<td>$0.95</td>
<td>43,000</td>
<td>$39,650.00</td>
</tr>
<tr>
<td>Outdoor Classroom</td>
<td>EA</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Map Striping</td>
<td>EA</td>
<td>$1,500.00</td>
<td>1</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Tetherball Striping</td>
<td>EA</td>
<td>$150.00</td>
<td>1</td>
<td>$150.00</td>
</tr>
<tr>
<td>Hopscotch Striping</td>
<td>EA</td>
<td>$400.00</td>
<td>3</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Basketball Court Striping</td>
<td>EA</td>
<td>$400.00</td>
<td>1</td>
<td>$400.00</td>
</tr>
<tr>
<td>4-Square Strip</td>
<td>EA</td>
<td>$250.00</td>
<td>2</td>
<td>$500.00</td>
</tr>
<tr>
<td>Funnel Ball Striping</td>
<td>EA</td>
<td>$200.00</td>
<td>0</td>
<td>$200.00</td>
</tr>
<tr>
<td>Painted Line-Up Lines</td>
<td>LS</td>
<td>$200.00</td>
<td>1</td>
<td>$200.00</td>
</tr>
<tr>
<td>Painted Goal Posts</td>
<td>EA</td>
<td>$50.00</td>
<td>5</td>
<td>$250.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$11,220.00</td>
</tr>
<tr>
<td><strong>Running Track</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crusher Fines, 4&quot; WIDE X 4&quot; depth</td>
<td>SF</td>
<td>$1.00</td>
<td>5,100</td>
<td>$5,100.00</td>
</tr>
<tr>
<td>Crusher Fines Stabilizer</td>
<td>SF</td>
<td>$1.20</td>
<td>5,100</td>
<td>$6,100.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$11,220.00</td>
</tr>
<tr>
<td><strong>Site Furnishings, Athletic Equipment and Misc.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picnic Table</td>
<td>EA</td>
<td>$1,000.00</td>
<td>3</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Trash Receptacle</td>
<td>EA</td>
<td>$650.00</td>
<td>3</td>
<td>$1,950.00</td>
</tr>
<tr>
<td>6' Bench</td>
<td>EA</td>
<td>$850.00</td>
<td>6</td>
<td>$5,100.00</td>
</tr>
<tr>
<td>Banner Pole and Banners</td>
<td>EA</td>
<td>$900.00</td>
<td>5</td>
<td>$4,500.00</td>
</tr>
<tr>
<td>Basketball Goal</td>
<td>EA</td>
<td>$1,200.00</td>
<td>2</td>
<td>$2,400.00</td>
</tr>
<tr>
<td>Tetherball Poles</td>
<td>EA</td>
<td>$350.00</td>
<td>4</td>
<td>$1,400.00</td>
</tr>
<tr>
<td>Permanent or Moveable Soccer Goals</td>
<td>EA</td>
<td>$1,000.00</td>
<td>3</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Backstop with Hood</td>
<td>EA</td>
<td>$2,500.00</td>
<td>2</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Shade Structures @ Plaza</td>
<td>EA</td>
<td>$25,000.00</td>
<td>1</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>Gateway Feature</td>
<td>LS</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$61,350.00</td>
</tr>
<tr>
<td><strong>Habitat Gardens, Planting and Irrigation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garden Soil Prep</td>
<td>CY</td>
<td>$35.00</td>
<td>160</td>
<td>$5,600.00</td>
</tr>
<tr>
<td>Irrigation, tree bubblers</td>
<td>EA</td>
<td>$60.00</td>
<td>40</td>
<td>$2,400.00</td>
</tr>
<tr>
<td>Shade Tree, 3&quot; caliper</td>
<td>EA</td>
<td>$400.00</td>
<td>20</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>Deciduous Ornamental Tree, 2.5&quot; caliper</td>
<td>EA</td>
<td>$100.00</td>
<td>0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Steel Edger</td>
<td>LF</td>
<td>$5.00</td>
<td>20</td>
<td>$100.00</td>
</tr>
<tr>
<td>Boulder-field</td>
<td>EA</td>
<td>$150.00</td>
<td>18</td>
<td>$2,700.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$13,248.00</td>
</tr>
<tr>
<td><strong>Vegetable Gardens, Planting and Irrigation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garden Soil Prep</td>
<td>CY</td>
<td>$35.00</td>
<td>20</td>
<td>$700.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>LS</td>
<td>$1,500.00</td>
<td>1</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Concrete move bow, 8&quot;x6&quot;</td>
<td>LF</td>
<td>$110.00</td>
<td>180</td>
<td>$19,800.00</td>
</tr>
<tr>
<td>4' Chainlink Fence</td>
<td>LF</td>
<td>$20.00</td>
<td>180</td>
<td>$3,600.00</td>
</tr>
<tr>
<td>Chain Link Gate, 4&quot; width (at Vegetable Garden)</td>
<td>EA</td>
<td>$150.00</td>
<td>1</td>
<td>$1,500.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$8,480.00</td>
</tr>
<tr>
<td><strong>Metal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel Edger at Running Track</td>
<td>LF</td>
<td>$5.00</td>
<td>2,511</td>
<td>$12,555.00</td>
</tr>
<tr>
<td>4' Chainlink Fence (at ECE Play Pit and Comm. Garden)</td>
<td>LF</td>
<td>$20.00</td>
<td>475</td>
<td>$9,500.00</td>
</tr>
<tr>
<td>6' Chainlink Fence</td>
<td>LF</td>
<td>$25.00</td>
<td>0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Chain Link Gate, 4&quot; width (at ECE Play Pit)</td>
<td>EA</td>
<td>$350.00</td>
<td>2</td>
<td>$700.00</td>
</tr>
<tr>
<td>Chain Link Gate, 8&quot; wide - 6ft. double swing</td>
<td>EA</td>
<td>$1,200.00</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$22,755.00</td>
</tr>
<tr>
<td><strong>Site Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td>$346,690.50</td>
</tr>
<tr>
<td><strong>Project Start Up</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical construction mobilization</td>
<td>1</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000.00</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical infrastructure construction/repair</td>
<td>1</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000.00</td>
</tr>
<tr>
<td><strong>Demolition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical Demolition</td>
<td>1</td>
<td>$25,000.00</td>
<td>1</td>
<td>$25,000.00</td>
</tr>
<tr>
<td><strong>Architecture Engineering and Coordination</strong></td>
<td>1</td>
<td>$27,735.24</td>
<td>1</td>
<td>$27,735.24</td>
</tr>
<tr>
<td><strong>Contingency Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>$34,669.05</td>
</tr>
<tr>
<td>10% of construction cost</td>
<td>1</td>
<td>$34,669.05</td>
<td>1</td>
<td>$34,669.05</td>
</tr>
<tr>
<td><strong>Project Grand Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$454,094.79</td>
</tr>
</tbody>
</table>
Resources

- Commerce City Press Release February 5, 2011
- Colorado Children’s Campaign
- Education News Colorado “Child obesity threatens Colorado’s future” by Diane Carman on Feb 14th, 2011
- Health at a Crossroads
- 2010 Supplement to the Colorado Health Report Card – Colorado Health Foundation
- National Center for Health Statistics,

Acknowledgements:

- Colorado Health Foundation
- Principals, staff, students and parents at:
  - Alsup Elementary
  - Central Elementary
  - Dupont Elementary
  - Kemp Elementary
  - Monaco Elementary
  - Rose Hill Elementary
- Adams County School District 14 Administration
- Adams County School District 14 Facility Maintenance
- Adams County School District 14 Communications
- Adams County School District 14 Wellness
- Commerce City Parks and Recreation
- 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
- Christopher Schooler
  - Senior Research Associate
- Graduate Student Interns:
  - Erin Fiene
  - Garrick Swansen
  - Augusta Prehn
  - Bryon Weber
  - Michael Griffith
  - Letora Fortune
  - Patrick Pickard
  - Patrick Healy
MONACO ELEMENTARY

VISION
The Monaco playground will be a stimulating play environment focused on recreation, education, and community.

GOALS
1. Create an inviting, colorful, and safe environment for students and surrounding community
2. Increase physical activity and outdoor learning
3. Offer a variety of play equipment that is appropriate for all age groups
4. Create an ADA accessible playground
5. Increase shade and gathering spaces to encourage positive social activity.
6. Beauty the schoolyard and highlight school spirit by incorporating the mustang mascot, school colors, student art, and other elements that students can be proud of.

EXISTING CONDITIONS

During the design process a site inventory analyzed play equipment, ADA accessibility and site usage. Our studies also included looking at site issues including drainage, safety concerns, site circulation, site, parking, maintenance, environmental concerns, and plant conditions.

Design Advisory Team
The playground design advisory team played a critical role in creating the Monaco Elementary Active Play Areas Master Plan. The design team was made up of the Principal, Health Clerk, P.E teacher, Pre-K teacher, a parent teacher liaison and staff members. Attendance to each meeting varied based on staff availability.

A LOOK INTO MONACO ELEMENTARY’S FUTURE
The school currently maintains a good relationship with the community and would like to further that relationship by hosting community events near play areas with shaded seating areas. The school mascot, the mustang, is very important to Monaco’s identity.

Presented by:

The Colorado Health Foundation
DAMS 14
Learning Landscapes
CCCD

Monaco Elementary