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Section One

- Executive Summary
- Jefferson County - Background
- Learning Landscapes - Background
Schoolyards provide an opportunity to utilize the built environment to promote increased physical activity for children and the surrounding community. Studies show that well-planned and equipped schoolyards not only increase physical activity but enhance the educational environment, resulting in improved student achievement.

Such environments provide physical and mental challenges which translate to improved health and learning attention, with features such as outdoor classrooms elevating spaces from simple play areas into impactful learning landscapes. Furthermore, these enhancements enable schools to become positive focal points in their neighborhood, serving as places to gather and meet, places to enjoy and places which enhance the overall community.

In the Spring of 2011, members of the Fairmount Elementary School Parent Teacher Association teamed with Learning Landscapes to envision the future of the Fairmount schoolyard. Together the team explored the potential of the school’s play areas and opportunities of the overall school property. Through a collaborative design process, the team gathered input and generated the master plan which outlines the vision, goals, and priorities related to transformation of Fairmount’s current site offerings into a true learning landscape.

Learning Landscapes is operated by the Colorado Center for Community Development - a center associated with the College of Architecture and Planning at the University of Colorado Denver. Learning Landscapes seeks to strengthen elementary schools and their surrounding neighborhoods by designing playgrounds that promote physical activity, social interaction and serve as a platform for educational engagement.

With over ninety schoolyard renovations complete within the Denver Public School system, Fairmount Elementary marks the program’s first involvement in the Jefferson County School District. The success of the program is founded on a mutual respect of issues related to aesthetics, maintainence, safety, recreational and educational objectives.
Mission:
To provide a quality education that prepares all children for a successful future.

Values:
Integrity
Valuing People
Teamwork
Exemplary Performance

Goals:
All students graduate prepared for continued learning and the world of work in the 21st century.

All employees are accountable for a high performing organization.

District Profile:
91 Elementary Schools
3 K-8 Schools
19 Middle Schools
17 High Schools
10 Option Schools
1 Online School
2 Outdoor Laboratory Schools

1% American Indian/Alaska Native
4% Asian or Pacific Islander
2% Black
20% Hispanic
73% White
51% Male
49% Female

Overview:
Jeffco Public Schools has been providing educational excellence for 60 years. Approximately 11 percent of all the K-12 students in Colorado attend a Jeffco School.

Jeffco Public Schools is the largest school district in Colorado with almost 86,000 students and approximately 12,000 employees.

Step inside one of our 141 schools and you will see a staff dedicated to building a bright future for every student. Our staff is supported by a committed school board, involved parents and a caring community that combine to provide quality education that prepares all children for a successful future.

Teachers:
Jeffco Public Schools has approximately 4,700 teachers. Our teachers are highly qualified. Many have advanced degrees and several have earned national and state recognition.

99% Highly Qualified*
58% Have Masters Degrees
1.1% Have Ph.Ds

*According to Federal No Child Left Behind Requirements.

Source: www.jeffcopublicschools.org
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.
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, gardens, traditional play elements and non-traditional play elements.

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

**Educational Elements** found on a Learning Landscape: History, Geography, Mathematics, Reading & Writing, Earth, Life, and Physical Science
**Intent of the Master Plan**
The master plan is intended to serve as a road map for proactively developing strategies and tactics needed to develop sound, safe and active play areas proven to increase activity for students and surrounding community members.

The purpose of the master plan is to strategically position Fairmount to capture opportunities to improve and expand play areas as they become available. The plan is intended as a tool for the school, parents, and district administration to seek funding for future schoolyard renovations and wellness initiatives.

The master plan is a written report and plan which sets forth a structure for future campus improvements. The vision and goals speak to the desires of the school and community, as defined through the use of text and imagery. It is the goal of this plan to establish a platform and framework for future improvements, documenting the decision making process which guides fund raising and schoolyard construction efforts.

**Planning Process**
The Master Plan process took place during the Spring and Summer of 2011 and involved input at both the individual school and district levels.

Within the Fairmount community, the collaborative process was guided by the school’s PTA leadership and facilitated by Learning Landscapes staff. The team members helped to identify issues with the existing site, 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.

Discussions were also held with the district to address issues beyond the control school PTA and open an on-going dialogue with district representatives whose approval will be required prior to implementation of improvements.

This collaborative effort allowed the school to develop a schoolyard master plan to reflect the context, culture and curriculum unique to Fairmount and at the same time align with the needs and desires of the District.
Recommendations
An improved play environment will serve multiple purposes, not only engaging Fairmount students but the entire community. The following are overall recommendations for implementation of the Master Plan:

- 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.

- 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 be able to interact and be active with one another regardless of mobility.

- Provide More Hard Surface Games with Interactive, Educational Elements
  - Colorful hardscape improves aesthetics, excites students and sparks creativity during play.

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

- Develop Outdoor Learning Environments
  - Spaces for teachers to bring students outside 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.

- Install Climbing Structures
  - To increase upper body strength and coordination.
Section Two

- Fairmount - Background
- Vision & Goals
- Existing Conditions
- Site Use Diagram
- Play Ground Assessments
**Mission Statement**

Student Academic Success: Fairmount Elementary School and Community provides a caring environment that fosters high academic standards, responsible student behavior, and positive student self-concept.

**Sources of School Pride (From Fairmount Website)**
- An active PTA and parent advisory group that supports technology, the arts, running club, and much more.
- Being a Positive Behavior Support school. At Fairmount, we CARE (Community, Attitude, Respect, Excellence).
- Integration of technology into instruction using SMART Boards, laptops, the computer lab, and document cameras.

**Additional Information (From Fairmount Website)**
At Fairmount, we believe in students having a consistent educational experience from Kindergarten through 6th grade.

We have a school-wide reading program that consists of phonics, fluency, vocabulary, and comprehension instruction that is designed to meet the needs of all students.

We have a rigorous math curriculum that expands student understanding and challenges them to think mathematically. We have many opportunities for students to get targeted instruction when they are struggling and to be challenged when they are moving ahead.

We also have a strong arts program that is designed to meet the needs of the whole child.

At Fairmount, we care.

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**School Background**

Fairmount Elementary, home of the Firebirds, is located in the Fairmount District of unincorporated Jefferson County, Colorado. The approximately 65,000 square foot facility sits on 12 acres at the eastern slope of Table Mountain, on the northeastern edge of Golden, CO. The grounds are accessed from West 50th Avenue, approximately two blocks west of the intersection of West 50th Avenue and McIntyre Rd.

With area schoolhouses dating back to the late 1870's, Fairmount School was officially founded in 1905. The original school site was located approximately one-third mile south from the existing location.

The current facility opened in 1961, and has undergone numerous renovations and expansions since that time. The most recent expansion took place in 2006 with the renovation of the administrative offices and addition of nine classrooms, a gymnasium and music rooms.

Being in an unincorporated portion of the county, the school is surrounded by low to medium density housing and estate residential areas. Agricultural uses remain threaded throughout the area creating large parcels of undeveloped land. South of the school, are large office park and industrial facilities, posing a sharp contrast to the character of the area otherwise surrounding Fairmount.

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**Recreation soccer field and gravel track located in the school’s northwest corner. This view faces southwest showing nearby Table Mountain.***

**Main Entrance and Student Pick-Up/Drop-Off area on the south side of the building.***

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**Fairmount Firebird - School Mascot & Logo**

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**Fairmount Elementary - Background**
With a current enrollment of 625 students, Fairmount has seen a consistent increase in attendance during recent school years, up from 560 students in the fall of 2008 and 598 in the fall of 2009.

Enrollment statistics from 2009-2010 reflect 332 males (55.5%) and 266 females (44.5%). The school is predominantly white (83.6%) with the largest minority group being Hispanic (9.4%), followed by Asian (5.7%), American Indian (.8%) and Black (.5%).

Fairmount demographics are consistent with the Jefferson County School District, both at the elementary and district levels which reflect a predominately white population at 72.4% and 73.5% respectively.

Catchment Area
Fairmount students come from the immediately surrounding area, both east and west of McIntyre Rd. East of McIntyre the catchment area extends to State Highway 58 on the south and Ward Rd on the east, with a northern boundary located as far north as West 58th Avenue. A significant portion of this northern boundary is the Van Bibber Open Space on the south side of West 58th Avenue.

West of McIntyre the area extends south to State Highway 58, west to Table Mountain to include the neighborhoods west of Easley Rd. and north to West 64th Ave. Fairmount’s catchment area also includes the Tablerock Subdivision located on the southeast corner of Highway 93 and West 58th Ave.

Surrounding area:
From the City of Golden Comprehensive Plan: "Golden is a unique and distinctive place which takes advantage of its natural and cultural resources. The city preserves its independent small-town character and friendly atmosphere."
Vision & Goals

**Vision**

To create an environment that fosters health, wellness and fitness by offering fun, creative, and educational play opportunities – inclusive of all children.

**Goals**

Enhance the play environment and school yard both functionally and aesthetically.

Improve safety of the parking area to better facilitate the pick-up and drop-off of students through improved circulation and visibility for drivers and pedestrians.

Introduce interactive school yard elements which serve as an extension of the classroom, offering hands-on application of curriculum goals and objectives via outdoor learning opportunities.

Increase Wellness and Physical Activity by capturing student’s interest and attention and promoting active play by individuals and groups.

Promote positive, safe and engaging experiences of the schoolyard for all ages through the introduction of age-appropriate play equipment, particularly for older age groups.

Better provide all students with opportunities for an engaging, creative play experience by increasing overall accessibility and activities for those with disabilities.

Maximize and diversify play areas and opportunities by improving portions of the school yard, currently under utilized due to disrepair.

**Constituent Needs & Desires**

In meeting with the various stakeholders, a variety of issues and needs arose.

In terms of the overall site, parking was the top concern – specifically related to the safety of the arrival and departure process. Parents and staff raised concerns not only for increased parking capacity, but improved circulation and increased safety for students moving between vehicles and the school entry.

A general consensus was gathered regarding the desire to enhance the aesthetic and recreation potential of the school grounds, including an increased variety and quantity of play opportunities and introduction of general landscape improvements across the property. Preservation and expansion of grass recreation amenities was expressed, including enhancements to increase usability of the baseball field. Alternative play areas to disperse impacts and alleviate overuse of individual areas and elements such as the soccer field as also desired.

Foundational to these improvements is the desire to incorporate educational components into the grounds, including provision of outdoor classroom space for instruction, and experiential learning elements such as a classroom garden. The prominent drainage swale was identified as an opportunity for educationally focused landscape improvements related to storm water management and representative Colorado ecosystems.

**Design Advisory Team**

A design advisory team was formed, comprised of parents and school faculty. Under the guidance of parent representatives from the school PTA, input was received from around two dozen parents and staff who attended monthly PTA meetings. In addition to PTA, meeting were held with the leadership team, school faculty, and school district representatives.

Through these biweekly and monthly gatherings, this group served to guide the master plan process and offer direct input into the site plan for both the playground and overall school grounds. First establishing goals and objectives to be addressed during the planning process, the team then shaped the plan through decision making regarding the location and layout of physical elements on the site to best suit the needs of Fairmount and the identified objectives.

The team gathered input from various stakeholders, including students and parents to broaden the perspective on the perceived needs and desired outcomes held by the Fairmount school community. Input was compiled from student drawings depicting their dream playground, and an online photo survey of play images was used to capture opinions about the future play environment.

Through this process, the design advisory team is confident that the master plan balances the needs and desires of the various stake holders and sets forth a strong vision for the future improvement of the Fairmount Elementary site.
Presented by: Fairmount Elementary PTA

Vision & Goals

Wish list
Outdoor Classroom
Parking Expansion & Safety Improvements
Recreation Field Improvements (Baseball diamond)
Improved Play pits & Equipment
Classroom/Learning Garden
Cultivated Vegetable Garden
Enhanced overall landscape

Priorities
Eco-Revelatory Zone & Old Court Improvements
Parking Expansion & Safety Improvements
Outdoor Classroom
Classroom/Learning Garden
Overall site landscape enhancements

Fairmount Elementary
Student Input
In addition to input gathered from the design advisory team, Fairmount students were given an opportunity to engage in the planning process by brainstorming and producing drawings of their dream playgrounds.

Drawing sheets were sent home with students and over 70 were handed in. Observing the top two or three ideas from each student’s image, the word cloud graphic below reflects the frequency with which particular items appeared in the drawings as students imagined their desired future environment.
The above photo survey was conducted via an online survey, where participants were asked to select from the images the five elements they would most like to see incorporated into the school grounds. The adjacent graph reflects the most popular items selected.
Equipment and Materials
The existing play areas, located on the north side of the school building, consists of two play pits, with a total of five overall pieces of equipment.

Located in the northeast corner, the primary age playground consists of an approximately 3,300 square foot play pit divided by a chain link fence into two zones. The western zone, approximately 1,770 square feet in size features a multi-use, composite play structure offering vertical climbing apparatuses and slides connected via a raised platform. The eastern zone of the play pit is approximately 1,530 square feet and contains six swings. Both zones are surfaced with engineered wood fiber (E.W.F.) and bounded with an at grade concrete border.

On the north and northwest corner of the building, the intermediate age play area consists of an approximately 9,800 square feet play pit. The northern zone, approximately 8,000 square feet, contains two composite play structures. The eastern most structure is the largest, offering three pods of climbing apparatuses and slides connected via monkey bars and/or rings. To the west a second, smaller structure exists consisting of multi-level platforms connected via rings and monkey bars. The area surrounding these two structures is bordered with a concrete strip and surfaced with crushed gravel. Due to change in topographic elevation from north to south, the border is at grade on the northern side of the pit, and creates a small retaining ledge on the south side of up to 18 inches, tapering back into grade as it wraps towards east and west sides. To the south of this area is a set of six swings, outlined by a concrete border of approximately 1,800 square feet and surfaced with EWF.

In addition to the play pits and equipment, the site offers additional recreation opportunities in the form of court
Presented by: Fairmount Elementary PTA

Fairmount Elementary PTA

2011 University of Colorado at Denver

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Presented by:

Fairmount Elementary PTA

2011 University of Colorado at Denver

19

games and a grass recreation field. The site currently has approximately 21,000 square feet of asphalt surfacing connecting the school building to the play pits. Included in this hard surface area are a basketball court of approximately 50 by 70 feet, two tether ball poles, three four-square courts, and numerous hop sketch courses.

Site Accessibility
Currently, the site can only be accessed by vehicle because there are no sidewalks along 50th Ave. For this reason the school requires that students either ride a bus or are picked up in vehicles by parents. There are two formal entries on southern edge of the site, one designated for buses and the other for all other traffic. A third entry with access to the grass recreation fields exists towards the southwest corner, however is closed with a gate. The east, west, and northern edges of the site border private residential properties and therefore offer no formal access points.

ADA Accessibility
Arriving at the school, there are four accessible parking spaces across from the main entry. This amount is consistent with ADA regulations for a parking lot with a capacity between 76-100 spaces. Site circulation on the exterior of the building takes place via a concrete walkway wrapping the west side of the building. Additionally, the rear of the site can be accessed from within the building, with playground access from the courtyard on the north side of the building. Circulation within the school building is believed to be ADA compliant.

Specifically regarding the play environment, the asphalt courts adjacent to the building offer the best circulation through the play area. Other than access to grass areas and hardscape, the site offers little play opportunities for children in wheelchairs. The primary aged play pit is surfaced with engineered wood fiber (EWF) and accessed at grade from the asphalt hardscape. One transfer station exists for access onto the elevated play equipment, including a small slide.

The intermediate aged play pit is accessed via an asphalt ramp leading to the southern edge of the pit, with a concrete ramp into the swing area, which is surfaced with EWF. The remaining portions of the intermediate play area has less conducive surfacing (crushed gravel) and also lacks any directly accessible equipment and/or transfer stations.

It should be noted that the school does currently serve students in wheelchairs, making these needs very real at Fairmount.

Drainage
Drainage plays a prominent role on the Fairmount site. Overall, the site topography falls from north to south (rear of school to front of school), with the site’s topographic high point found in the northeast corner and low point in a drainage swale, centrally located along southern property line. The most prominent aspect of site drainage is the large swale running north to south along on western side of the school building. The swale begins approximately midway down the side of the building and runs south towards the school’s entry along the southern property line and W. 50th avenue.

The western half of the site is the flattest area of the property and location of the recreation fields. The northern most soccer field is well drained, with the site contours indicating a 2% slope from north to south. The baseball diamond located in the southwest quadrant of the site does however exhibit inadequate drainage and standing water. The site topographic survey indicates consistent grades of 1 to 1.5%, below the recommended minimum 2% slope for grass/natural surfaces.

Existing Conditions

Inadequate drainage on existing baseball outfield.

Wheelchair Access to Existing Play Pit
The asphalt recreation court on the north side of the building also features prominent drainage. To conform to site topography the southern portion of the hardscape surface drains north (away from the school building) while the northern edge (an existing basketball court) drains south. These two opposing flows converge on a trench drain, which accepts water for sub-surface removal. Snow removal currently occurs in this area, with snow stockpiling along the north edge. With the drainage described above, stockpiling here results in snow melt flowing south across the basketball court, creating dangerous freeze/thaw icing issues on the playing surface. Ice issues exist elsewhere on the hardscape due to a location on the northern side of the school and the resulting shadows cast by the building itself.

The northeast corner of the site, east of the primary play pit also appears to present some drainage issues. Existing attempts to drain this area are not functioning properly due to drain inlet elevations being raised above the surrounding grade. With water unable to reach the intended drain inlets, standing water accumulates in an area which seems popular for primary aged children to play when not using the play equipment.

Safety

There are two primary safety concerns on the school grounds. The first relates to parking and access to the school building. Due to the high number of vehicles during arrival and departure times, the parking lot becomes very congested. With current traffic patterns and parking stall alignment pedestrian traffic is forced to mix with and cross vehicular lanes of travel, limiting sight distances and creating a safety hazard.

The other significant safety concern relates to supervision of the play area itself. With recreation areas on both the northern and western edges of the school, the building corner limits visibility by staff to all portions of the area from one vantage point.

A slipping hazard exists on the asphalt surface near the intermediate play pit, where gravel surface materials spill over the concrete edge and land on the asphalt below. The loose gravel reduces traction, particularly as children return to the building, running or jumping down from the play pit onto the asphalt below.

The location of the swings creates a concern related to movement of children from the center courtyard to the soccer field. With the field being one of the most popular parts of the playground, a significant number of children traverse this area, with the swings falling on the most direct path children are likely to travel. This results in students running in between and amidst other children using the swings.

Other safety concerns relate to inadequate drainage of baseball field and hardscape areas (see drainage section).

Vehicular Circulation & Parking

Vehicular circulation is essentially limited to the southeastern quadrant of the site. The two vehicle entries are located on the south boundary along W 50th Ave. Bus traffic is isolated to the western entry and designated bus loop. All other traffic (parents, staff, maintenance, delivery, etc) uses the eastern entry. Traffic is routed into a parking area, with most circulation located around the perimeter of the lot. A gravel, overflow lot is located to the southeast of the main parking area. Currently there is a parking for 86 cars, with approximately 15 additional overflow spaces. Currently there is no formal vehicle access to the rear of the school. A curb cut from the bus loop approach road allows access to the grass field associated with the baseball diamond. From this point vehicles can travel across the grass surface, around the west side of the building to the rear of the school.
No vehicular circulation takes place around the eastern side of the school, precluded by the building’s close proximity to the eastern boundary and fence.

**Pedestrian Circulation**
There is no existing pedestrian connectivity to the surrounding neighborhood and/or adjacent parcels. Pedestrian circulation is focused on the main entry located on the south side of the building. Concrete walks run along the southern side of the building providing access to the carpool lane and direct access to the bus loop. Additional walkways run around the west side of the building to access the rear of the school. The north side of the school property features informal circulation routes across grass areas and the asphalt court space.

The most heavily used route on the playground is from the central courtyard space to the popular soccer field in the northwest corner of the property. Much of the route takes place on the asphalt court, but access to the field requires travel across a grassy area and/or through the play pit containing swings. Surfacing is not currently conducive for this circulation pattern, and a safety issue arises with traffic passing through the swing area.

No pedestrian circulation takes place around the eastern side of the school, precluded by the building’s close proximity to the eastern boundary and fence.

**Maintenance**
Maintenance issues identified on site relate mostly to surfacing, both of turf grass and play pit materials. Concerns are raised by inadequate drainage of the southern recreation field and baseball diamond, and overuse of the soccer field. Additional maintenance items include snow removal strategies which create undesired drainage patterns on the basketball court/asphalt area and overflow play pit surfacing on the asphalt hardscape.

**Environmental Conditions**
The existing environmental conditions reflect a site that has been manipulated for construction purposes and minimally developed. There don’t appear to be any areas of the site that reflect undisturbed conditions, and there is minimal habitat aside from limited trees on site.

Vegetation is mostly comprised of turf grass and a combination of deciduous and evergreen trees. The western half of the property contains two grass recreation fields – one for soccer and one for baseball. The soccer field is approximately 9/10ths of an acre, and the baseball field 2.1 acres including outfield. The southeast corner of the site consist of a roughly 3/4 acre grass field and contains 10 evergreen trees. Some of this area has been covered in dirt/gravel for use as overflow parking. Much of the grass, particularly on the baseball outfield and surrounding the play pits is sparse due to inadequate drainage and overuse respectively.

A mix of deciduous and evergreen trees can also be found closer to the school building on the south side. On the rear of the site, the most prominent vegetation is a mature cottonwood tree located along the northern property line, north of the soccer field and intermediate aged play pit.

One noteworthy condition unique to Fairmount is the strong winds traveling down-slope from the west. Typical of many Front Range locations, these winds have a significant impact on the experience of the site, and at times even pose a threat to school property. In the past, vehicle windows have been blown out while in the school parking lot. In addition to posing design considerations, there is perhaps an opportunity to capitalize on this unique condition as both an educational focus and organizing principle for the design of playground enhancements.
The existing play equipment was analyzed with the help of Cathy Weissberg, a play equipment specialist from Recreation Plus in Golden, CO.

From her observations, Cathy identified that the existing intermediate aged equipment, dating back to 1990, no longer meets current guidelines. Examples of non-compliant features include: height of stair risers exceeding 8", lack of kickplates to close vertical gaps between risers, use of a two piece slide and failure to provide safety hoods at the top of all slides. The gravel surfacing also needs to be replaced with an accessible surface such as engineered wood fiber (EWF).

As a result of these observations, the recommendation is that existing equipment be left alone until the school is capable of complete replacement. Any modifications made to existing equipment would require that the entire structure be brought up to current ADA, ASTM and CPSC guidelines.

Relocation of the intermediate age swings to the vacant area north of the existing play pit, along the northern property fence was also discussed. Adequate space was found to move the swings to this location and potentially add additional swings or equipment depending on the size of future play pit. A shade structure was also found to be feasible in this area, north of the existing basketball court.

Despite the limitations on existing equipment, there are several places within the existing intermediate play pit to add additional stand alone play features. Much of this possibility requires removal of a 6" wide concrete curb which appears to have been the previous boundary of the now expanded play pit. Removal of this curb would create substantial area for introducing additional individual pieces. (See next page)

It is important to note that a Federal regulation is coming that all public entities must conduct a formal assessment of their play environments relative to ADA, ASTM, and CPSC guidelines by May 2012.

Following this assessment, non-compliant features must be brought up to current standards by May 2015. No opportunities will be given to grandfather in existing equipment.
## Potential Play Features:

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Initial Pricing as of May 2011

Section Three

- Concept Diagrams
- Preferred Master Plan
- Ordering System
- Ideagrams
Concept Alternatives. 

To explore possibilities for the overall schoolyard improvements, three initial concept plans were developed to propose various locations for, and relationships of, new or improved site elements.

The alternatives were produced for the purpose of generating discussion with the design advisory team. They were not necessarily meant to be selected intact, but to invite discussion on the opportunities and constraints of individual elements and relationships proposed in each concept. A revised and/or combined alternative was then produced given the design features and site arrangements deemed most appropriate by the team.

Following a series of design iterations to further refine the plan, consensus was reached for a preferred alternative which is now proposed.

Existing Schoolyard Configuration

- Outdoor classroom north of basketball court
- Production Garden south of soccer field
- Parking expansion west of bus loop in outfield of existing baseball field
- Learning garden in large drainage swale
- Natural play areas adjacent to each existing, enhanced play pit

Concept One

- Outdoor classroom northwest of intermediate aged play pit
- Production Garden east of new soccer field, replacing baseball field
- Parking expansion south of existing parking lot
- Learning garden reaching north to connect to existing intermediate play pit
- Habitat garden along north property line into northeast corner
- Courtyard asphalt broken up with planted islands

Concept Two

- Outdoor classroom south of intermediate aged play pit
- Large Production Garden to replace baseball field
- Parking expansion west of large drainage swale
- Learning garden in drainage swale, reaching north to connect to proposed outdoor classroom
- Natural play area along north property line into northeast corner
- Courtyard asphalt pulled back from classroom/building edge via planter space

Concept Three
Concept Alternatives - 3/1
This concept reflects input received from Fairmount staff following a presentation of the three initial site concepts.

Design Decisions:
- Keep existing soccer and baseball fields
- Locate outdoor classroom on southeast corner of building
- Relocate swings to northern property boundary
- Enhance connection of existing hardscape to soccer field
- Introduce buffer between asphalt play area and building
- Centrally locate shade structure above basketball court
- Utilize drainage area and outfield space for potential garden areas

Concept Alternative - 3/29
The revised concept dated 3/1 was presented to the Fairmount PTA, whose additional feedback produced the revised concept dated 3/29.

Design Decisions:
- Overall acceptance of plan as approved by staff/faculty
- Explore location along building’s west side for small garden
- Preserve baseball field outfield for garden or parking potential, but don’t designate space specifically for either

Revised Concept - 3/29
1. Existing Field & Track
The existing soccer field is to remain, maintaining a valuable and popular asset in the school yard. Deteriorating field conditions due to over-use will be addressed programmatically through rotational field use patterns and generally alleviated by expanded overall play opportunities.

2. Natural Play Area
Blending with the overall landscape enhancements, natural play areas offer opportunities for creative play in both active and passive forms. Comprised of natural features such as rocks, logs and earthen berms, these areas serve as aesthetic enhancement while offering non-traditional play opportunities to compliment the more formal play equipment elsewhere on site.

3. Enhanced Intermediate Playground
This large play pit will be maintained and modified to accept additional play equipment. Through removal of an existing interior concrete curb, the pit’s capacity can be expanded, allowing opportunity to introduce new features aimed at the older elementary age groups. Among ideas are a variety of climbing related features. Due to issue of code compliance, the existing equipment is to be left alone and unmodified. These features will likely need to be completely replaced in coming years. Existing gravel surfacing will be replaced with engineered wood fibers.

4. Relocated Swings
To improve the safety of children moving between the school building and soccer field, the existing swings will be relocated to the northern property boundary. Constructing a large play pit in this area potentially allows for additional swings (and/or other equipment) to be added.

5. Hardscape Recreation Space
Recognizing significant foot traffic between the school building and soccer field, this area will be enhanced to better facilitate traffic flow. Defining circulation in this area will help maintain safe surface conditions while serving as a vital link to visually and physically connect play areas across the site. This new connection will also help facilitate movement of service and emergency vehicles to the rear of the site in a non-destructive manner. Existing asphalt within the courtyard will be resurfaced and augmented by decorative educational and recreational paintings and games.

6. Alternate Outdoor Classroom Location
In addition to, or in lieu of, the area on the front side of the school, a small outdoor classroom gathering amenity could be built in this location, integrated into the hillside and play environment.

7. Primary Playground
With more recently updated equipment, and given size constraints of this area, the primary play area is to be maintained as is.

8. Planted Buffer
To soften the feel of the courtyard, currently a monotonous expanse of asphalt, a planting strip is to be introduced along the sidewalk which surrounds the school building. This buffer will also help mitigate issue of students using the building walls as an extension of the play space, reducing disruptions of the learning environment for students in classrooms.

9. Enhanced Landscape
General landscape enhancements focus on the “in-between” spaces – breaking up the monotony of the stark existing grounds and helping to reduce the scale
of large open spaces. To minimize maintenance and water needs, enduring materials and native planting will be used in these areas.

10. Eco-Revelatory Zone
Revamping the existing basketball court area will regain use of a currently under utilized portion of the school yard. Resurfacing asphalt, adding decorative painting and introducing crusher fines surfacing creates a flexible platform for formal and informal play, while general landscape enhancements provide shade and create gathering spaces. Implementing these improvements as phase one will offer a glimpse into the potential impacts of the master plan, helping build momentum for future projects.

11. Classroom Garden
Occupying an unused area on the west side of the building, the classroom garden will serve a place for students to gain hands-on, interactive experience while learning about plants, gardening, food literacy and healthy eating. Keeping the area smaller in size will help keep it manageable for a small group of teachers and volunteers.

12. Outdoor Classroom
Developing a space currently used for outdoor activities and instruction, this amenity will serve to extend the learning environment outside the classroom. The area will allow groups up to an entire grade level to gather in an amphitheater like space. Adequate buffering on the south and east sides creates a sense of enclosure for those in the space, while creating separation from the parking lot.

13. Learning & Habitat Garden
Taking advantage of a prominent drainage swale on the site, this area can be developed as a functional, educational landscape element for experiential learning on topics such as ecosystems, water quality and water management.

14. Enhanced Baseball Field
The existing field will be reconditioned to improve usability, resolving issues related to inadequate surfacing and drainage. The infield will be reduced in size to a more appropriate scale, and the outfield will be graded and seeded with buffalo grass.

15. Preservation Area
This area, comprised mostly of the outfield of the baseball diamond is being preserved for potential future use as a production garden, and/or expanded parking area as warranted.

16. Parking Expansion/Modifications
Future improvements to the parking area will seek to address issues related to capacity and the safety of the drop-off and pick-up process for students and parents. Many alternative solutions exist and are under discussion with the school district given the impacts on the entire school property.
Ordering systems are a way of organizing the site in an abstract way - looking at the influences unique to the school, neighborhood and site context for inspiration. In some instances the concept might be interpreted and presented literally, while in other cases remain a subtle thematic or representational device. In both scenarios ordering systems serve as an important part of a Learning Landscape, offering not only whimsy and inspiration that keep ideas and designs fresh and fun, but help integrate relevant educational components throughout the play environment.

Fairmount constituents were polled in an online survey as to which of the following ordering systems they'd like to see incorporated as improvements are implemented. It is possible and likely that multiple concepts can be woven throughout the school yard to reflect their top choices.
Learning Landscapes

Vision
To create an environment that fosters health, wellness and fitness by offering fun, creative, and educational play opportunities – inclusive of all children.

Goals
Enhance the play environment and school yard both functionally and aesthetically.

Improve safety of the parking area to better facilitate the pick-up and drop-off of students through improved circulation and visibility for drivers and pedestrians.

Introduce interactive school yard elements which serve as an extension of the classroom, offering hands-on application of curriculum goals and objectives via outdoor learning opportunities.

Increase Wellness and Physical Activity by capturing student’s interest and attention and promote active play by individuals and groups.

Promote positive, safe and engaging experiences of the school yard for all ages through the introduction of age-appropriate play equipment, particularly for older age groups.

Maximize and diversify play areas and opportunities by improving portions of the school yard, currently underutilized due to disrepair.

Wish list
Outdoor Classroom
Parking Expansion & Safety Improvements
Recreation Field Improvements (Baseball diamond)
Improved Play pits & Equipment
Classroom/Learning Garden
Cultivated Vegetable Garden
Enhanced overall landscape

Priorities
Eco-Revelatory Zone & Old Court Improvements
Parking Expansion & Safety Improvements
Outdoor Classroom
Classroom/Learning Garden
Overall site landscape enhancements

Existing Conditions

SITE MASTER PLAN

University of Colorado Denver
CCC
d Learning Landscapes
Fairmount Elementary - Jefferson County School District - Golden, CO
Section four

- Phasing
- Next Steps
- Cost Estimates
- Acknowledgements
Concept Sketch - Exploratory Eco-Revelatory Zones (Reduced)

**Design Philosophy:**
Create a network of active and passive exploratory zones/nodes across the site. These zones, linked by a meandering pathway, can eventually connect with nodes to be developed throughout the future playground. Through the introduction of natural landscape elements these areas offer not only recreational opportunity and aesthetic enhancement, but also create environments for outdoor education and instruction of individuals and groups.

**Key Components:**
- **Boulders** - 2 to 3' diameter, variety of sizes, placed in groups to create areas for sitting and play
- **Logs** - 12" diameter, 8-12' length, create seating and play opportunities
- **Stumps** - 8" diameter, variety of sizes to create flexible seating areas
- **Trees** - Deciduous and/or Evergreen species to provide shade and create enclosure
- **Topographic Berms** - 2 to 3' high to strengthen sense of enclosure for various zones
- **Mulched areas** - 4" depth with fabric barrier, optional steel edging
- **Pathway** - 4' width, crushed fines surfacing

*All individual elements (boulder, logs, stumps, etc.) should be partially buried for safety and aesthetic purposes.
*Height of individual elements should not exceed 29" above surrounding grade.

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**Implementation Priorities & Phasing**

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Notes:
These illustrations are for conceptual use only and not intended for use in construction. All site modifications are subject to the regulations of the Jefferson County School District and must be formally approved by the District prior to implementation.
With a focus on increasing available recreation space and revitalizing a currently under utilized portion of the schoolyard, improvement of the basketball court area on the school’s west side has been chosen as the first phase of implementation of the master plan.

Recapturing the opportunity provided by this recreation area will help reduce negative impacts on the adjacent soccer field related to overuse, while also providing staging grounds for additional recreational and educational activities.

As the master plan is built out over time, the area will connect to future improvements, providing a cohesive and integrated play and learning environment across much of the school yard.

Enhancing this area will provide an impact, visible from the front of school, gaining attention of a large portion of the school body, and hopefully sparking interest in the larger scope of planned improvements.

Assisting in the implementation of this portion of the project are many generous members from the Fairmount school community who are helping reduce costs by donating materials and professional services towards the site work, landscape enhancements and pavement resurfacing.

The primary surface materials chosen for the project are:

**Crusher Fines**  
- **Primary Surface Materials:** Crusher Fines
- **Primary Surface Area:** Basketball Court Area
- **Primary Surface Area:** Area Surrounding Basketball Court

**Activity & Gathering Zones**

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**Landscape Materials**

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$37,019.00 Est. Total at Full Cost

**Material Donations**

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$22,768.50 Est. Total Cost after Donations

## Cost Estimate

### Fairmount Elementary Learning Landscapes Master Plan Improvements

**Estimate of Probable Costs**

**Based Upon - Master Plan Documents as of 08/04/11**

**Prepared by:** CCCD - Learning Landscapes

<table>
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### Site Furnishings, Athletic Equipment and Misc.

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<td>10,000.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
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<td>47,200.00</td>
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</tbody>
</table>

### Planting and Irrigation

<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>Shrub Bed Soil Prep</td>
<td>SF</td>
<td>$0.15</td>
<td>5,000 $</td>
<td>750.00</td>
</tr>
<tr>
<td>Sod and Soil Prep @ field and play areas</td>
<td>SF</td>
<td>$0.55</td>
<td>0 $</td>
<td>-</td>
</tr>
<tr>
<td>Seed, low grow no mow areas</td>
<td>SF</td>
<td>$0.07</td>
<td>0 $</td>
<td>-</td>
</tr>
<tr>
<td>Irrigation, shrub beds</td>
<td>SF</td>
<td>$0.75</td>
<td>7,500 $</td>
<td>5,625.00</td>
</tr>
<tr>
<td>Irrigation, sod areas</td>
<td>SF</td>
<td>$0.55</td>
<td>0 $</td>
<td>-</td>
</tr>
<tr>
<td>Irrigation, tree bubblers</td>
<td>EA</td>
<td>$60.00</td>
<td>24 $</td>
<td>1,440.00</td>
</tr>
<tr>
<td>General Planting</td>
<td>EA</td>
<td>$5,000.00</td>
<td>1 $</td>
<td>5,000.00</td>
</tr>
<tr>
<td>Shade Tree, 3&quot; caliper</td>
<td>EA</td>
<td>$400.00</td>
<td>8 $</td>
<td>3,200.00</td>
</tr>
<tr>
<td>Deciduous Ornamental Tree, 2.5&quot; caliper</td>
<td>EA</td>
<td>$100.00</td>
<td>16 $</td>
<td>1,600.00</td>
</tr>
<tr>
<td>Boulder-field</td>
<td>EA</td>
<td>$150.00</td>
<td>15 $</td>
<td>2,250.00</td>
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<tr>
<td>Shredded Mulch, 4&quot; depth over fabric</td>
<td>SF</td>
<td>$1.20</td>
<td>0 $</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
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### Vegetable Garden

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</thead>
<tbody>
<tr>
<td>Soil Amendment</td>
<td>CY</td>
<td>$35.00</td>
<td>9 $</td>
<td>315.00</td>
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<tr>
<td>Concrete mow band, 8&quot;x6&quot;</td>
<td>LF</td>
<td>$11.00</td>
<td>23 $</td>
<td>253.00</td>
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<tr>
<td>4&quot; Chainlink Fence</td>
<td>LF</td>
<td>$20.00</td>
<td>85 $</td>
<td>1,700.00</td>
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<tr>
<td>Chain Link Gate, 4&quot; width</td>
<td>EA</td>
<td>$350.00</td>
<td>1 $</td>
<td>350.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>EA</td>
<td>$2,000.00</td>
<td>1 $</td>
<td>2,000.00</td>
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<tr>
<td>Compost Storage &amp; Accessories</td>
<td>EA</td>
<td>$1,000.00</td>
<td>1 $</td>
<td>1,000.00</td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td>5,618.00</td>
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</table>

### Eco-Revelatory Zone & Basketball Court Area

<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>See Separate Spreadsheet for details</td>
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### Site Improvements

<table>
<thead>
<tr>
<th>Category</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Quantities</th>
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<tbody>
<tr>
<td>Typical construction mobilization</td>
<td></td>
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<td>235,552.40</td>
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<tr>
<td>Demolition</td>
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<tr>
<td>Typical Demolition</td>
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<td>1 $</td>
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<tr>
<td>Infrastructure</td>
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<td>$25,000.00</td>
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<tr>
<td>Typical infrastructure construction/repair</td>
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<td>$10,000.00</td>
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<tr>
<td>Architecture Engineering and Coordination</td>
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<tr>
<td>8% of construction cost</td>
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<td></td>
<td></td>
<td>$18,844.19</td>
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<tr>
<td>Contingency Cost</td>
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<td>1 $</td>
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<tr>
<td>10% of construction cost</td>
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<td></td>
<td>$23,555.24</td>
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</tbody>
</table>

**Project Grand Total** $322,951.83
Resources:

Colorado Children’s Campaign

Commerce City Press Release February 5, 2011

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,


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Principal, staff, students and parents at Fairmount Elementary:
- Brady Stroup, Principal
- Susan Ganter, PTA Representative

Tim Reed
Jefferson County School District

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Recreation Plus - Golden, Colorado

University of Colorado Denver
College of Architecture and Planning

Colorado Center for Community Development

Professor Lois Brink
Executive Director

Cate Townley
Community Outreach Coordinator

Christopher Schooler
Senior Research Associate

Bryon Weber
Graduate Student Intern