Mesa County Valley 51 School District
Learning Landscapes

MASTER PLAN

Spring 2012

Nisley Elementary
<table>
<thead>
<tr>
<th>Section</th>
<th>Content</th>
</tr>
</thead>
</table>
| **Section 1** | Executive Summary  
Introduction  
Thompson District Background  
Intent & Process  
Recommendations  
Learning Landscapes Background |
| **Section 2** | School Background  
Existing Conditions  
Playground Assessment |
| **Section 3** | Design Advisory Team  
Vision, Goals, Wish List  
Master Plan |
| **Section 4** | Cost Estimate  
Resources  
Acknowledgements |
Executive Summary

- Introduction
- Mesa County Valley District 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, a place to gather and to meet, a place to enjoy, and a place that enhances the community’s appearance.

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

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

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

Colorado Health Foundation

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

Vision:
Colorado will become the healthiest state in the nation.

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

To support the goal of Healthy Schools and Healthy Communities, the Foundation seeks to fund active play spaces for schools designed to promote play and other forms of physical activity. This includes inviting playgrounds with active play areas to facilitate games and other forms of movement.

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

1. Develop healthy schools -- Expand the number of public schools and preschools that provide health care services, have health and nutrition education, physical education, healthy food in cafeterias and vending machines, and opportunities for physical activity.

2. Promote healthy communities -- Expand access to healthy and affordable foods; provide safe options for physical activity; teach individuals how to manage their chronic disease; and engage parents in raising healthy kids.

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

a) Increase the number of children and adults who engage in moderate or vigorous physical activity.

b) Increase the number of children and adults who eat adequate amounts of fruits and vegetables daily.

c) Increase the number of under-served Coloradans who have convenient access to recreational exercise and fruits and vegetables.
Mesa County Valley School District

Mesa County Valley School District 51 dates back to 1951 when the majority of numerous independent districts in Mesa County joined forces to create one entity. It encompasses the area known as the Grand Valley, which includes the smaller communities surrounding Grand Junction: Palisade and Clifton to the east, Fruita, Loma and Mack to the west, and Whitewater and Gateway to the south.

Out of 184 districts, District 51 is the twelfth largest school district in the state. Mesa County Valley School District 51 is a K-12 district with 25 elementary schools, 8 middle schools, 4 high schools, 2 preschools and seven other institutions of varying grade levels. District enrollment for the 2010-2011 school year was 22,203 students. District 51 employs 2,935 people consisting of 1,645 teachers and staff, and 1,290 support personnel.

District 51 is a diverse school district representative of many cultures. The largest racial demographic groups are White (73%) and Hispanic (21%), with additional representation from Asian, Black, American Indian and mixed-race students.

Total Enrollment: 22,203
1.49% American Indian/Alaskan Native
0.88% Asian
0.81% Black
20.94% Hispanic
73.21% White
0.14% Native Hawaiian/Pacific Islander
2.53% Two or more

Wellness

Mesa County Valley School District 51 adopted a Wellness Policy in June of 2006 to support a school environment that enhances learning and development of lifelong wellness practices. According to the district’s wellness policy, "The Board believes that the link between nutrition, physical activity, and learning is well documented. Healthy eating and activity patterns are essential for students to achieve their full academic potential, full physical and mental growth, and lifelong health and well-being."

The health and wellness of the greater community was documented in a recent publication by the University of Wisconsin Population Health Institute. According to this report, Mesa County ranks 30th in health outcomes and 32nd in health factors out of 57 counties ranked in Colorado. Health outcomes measures life expectancy, while health factors are based on health behaviors, social and economic factors, and the physical environment.
Intent of the Play Areas Master Plan

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

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

Planning Process

The Master Plan process took place from November 2011 to January 2012 and involved input at both the district level as well as the individual school level. At the district level the collaborative process was guided by the Wellness Coordinator and school faculty and staff. Learning Landscapes staff consulted with the district team members to ensure the individual school master plans aligned with the existing facility master plan, and the over all vision for the District. The team also discussed strategies for phasing, sustainable maintenance and funding for implementation.

At the school level the collaborative process was guided by the schoolyard improvement committee and facilitated by Learning Landscapes staff. The committee was comprised of the principal, staff, parents, and community members. The team members helped to identify issues with the existing site, form a vision and goals to guide the planning process, gather information and feedback from people outside the committee, provide feedback on iterations of the plan, administer photo surveys and collect student art work.

This collaborative effort allowed the school to develop an active play areas master plan to reflect the history, culture and curriculum unique to Nisley Elementary School in accordance with the school’s motto and vision.
The planning process consisted of the following tasks:

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

**Recommendations**

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

- Install New Age-Appropriate Play Equipment
  - To increase physical activity for all ages and to provide a variety of safe, challenging activities for all students.
- Install a Running Path
  - To provide opportunities for students, teachers, staff and community to be active and encourage each other to get moving.
- Install Climbing Structures
  - To increase upper body strength and coordination.
- Improve ADA Accessibility
  - Each play area should be accessible to all the students in the school. It is important for all students and community members regardless of mobility, to be able to interact and be active with one another.
- Provide More Hard Surface Games with Educational Elements
  - Input from the design committee and student surveys suggested adding more color on the schoolyard.
Students are excited by the color which sparks their creativity during play.

- Relocate Existing Vegetable Garden
  - To promote healthy eating, community stewardship, educational opportunities, and food literacy.

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

- Develop Community Gathering Spaces
  - Welcoming the neighborhood to gather, play, and exercise in the play areas will help build support stewardship of the community by providing a safe place to be active not just during recess but also after school and on weekends.

- Provide an Outdoor Lunch Area
  - Allow students to enjoy fresh air on warm or sunny days and reduce the number of students inside the cafeteria. This area could be incorporated into the outdoor classroom area to maximize the use of space.

- Increase Opportunities for Shade
  - To protect students and visitors from the intense Colorado sun and to provide additional gathering spaces for community members.

- Create an Outdoor Classroom
  - Give teachers the option to instruct students outdoors to interact with and observe the local environment.
Learning Landscape History
The first Learning Landscape was built at Bromwell elementary school in 1998 as a result of a six-year collaboration of parents, elementary students, staff, faculty, neighbors, local businesses and University of Colorado Denver (UCD) landscape architecture graduate students. The vast expanse of asphalt and pea gravel on the Bromwell playground resembled a prison yard, not an environment encouraging activity and child development. Bromwell parents and community members took action to transform the schoolyard into an active and aesthetically pleasing place for learning and physical activity.

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

UCD encourages faculty to connect the campus to the community. Landscape Architecture Professor, Lois Brink’s Learning Landscapes course proved a tremendous opportunity for civic engagement. Through Learning Landscapes, UCD graduate students are able to stretch the boundaries of landscape design, engage the community and gain real-world design experience. In 1999 (UCD) College of Architecture and Planning entered into a formal agreement to plan, design, and help build Learning Landscapes at DPS elementary schools throughout the district. The partnership between UCD and DPS has resulted in the transformation of 81 neglected public elementary schoolyards into Learning Landscape Playgrounds.

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

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

How We Do It:
By listening and actively involving the school community throughout the planning, design, construction, and maintenance of the Learning Landscape schoolyard. Each school is asked to form a Learning Landscape team to help inform design and programming decisions as well as keep a watchful eye for vandalism and maintenance issues after construction is complete. The Learning Landscapes team recruits students, parents and surrounding community help to build, maintain and improve the Learning Landscape. Each new learning landscapes has a volunteer build day where the school and community volunteers develop a sense of ownership and civic pride by creating outdoor artwork planting gardens, laying sod or building play equipment.

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

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

**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 school's theme, mascot, motto, etc. These components come in the form of games that are super-imposed on the hard court surfaces or words, poems, mathematical formulas etc. These educational elements can be tied to the school's curriculum whereby school teachers can use these elements by bringing their classrooms outside. Or the learning components can simply be whimsical things that all the kids do to use their imaginations while playing hopscotch, tetherball, or any activity.
Section Two

- School Background
- Existing Conditions
- Playground Assessment
School Background Information

Location and History

Nisley Elementary School is located at 543 28 3/4 Rd in Grand Junction, CO. The school got its name from Frank Nisley, who moved to Fruitvale, CO in 1918 from Indiana and served as superintendent of Fruitvale schools for 14 years. Nisley was involved in education in Fruitvale and Clifton schools until 1953, before passing away in February of 1956. Nisley Elementary was build and dedicated in his honor on October 16, 1958. The school mascot is the Grizzly bear and the school colors are blue and white. (http://nisley.mesa.k12.co.us/parents/franknisley.htm)

Neighborhood Context

Grand Junction, Colorado, serves as the hub of business and recreational activities on the western slope of the Colorado Rockies, about 250 miles west across the mountains from Denver. Situated 4600 feet above sea level at the junction of the Gunnison and Colorado Rivers, it is a fruit-producing oasis surrounded by Grand Mesa (the world’s largest flat top mountain), the Bookcliffs, the Colorado National Monument, and the Uncompahgre range. It is the county seat with an area population over 130,000. Most of the surrounding neighborhood consists of single-family houses with a few agricultural parcels strewn within.

Racial Make-up of Nisley Students:

- 55.9% White
- 1.3% Black
- 0.6% Asian
- 1.3% American Indian/Alaskan Native
- 39% Hispanic
- 0.6% Native Hawaiian/Pacific Islander
- 1.3% American Indian/Alaskan Native
- 1.8% Two or more races
- 0.6% Unknown

School Demographics

- Fall 2010 Enrollment: 479
- Male Students: 232
- Female Students: 247
- Free/Reduced Lunch: 79.4% of students

Grade Distribution of Students:

- Kindergarten: 70
- 1st grade: 71
- 2nd grade: 74
- 3rd grade: 68
- 4th grade: 64
- 5th grade: 74

School Mission:

“Together we are dedicated to the development of respectful, life-long learners in a safe and caring environment.” (nisley.mesa.k12.co.us)

School Motto:

“BEAR: Be Safe, Everyone Learns, Accept Responsibility, Respect S.O.S.”

Nisley Elementary
Home of the Grizzlies
Surrounding Area Demographics

The city of Grand Junction is the County seat of Mesa County with an area population of 130,000. Population growth in Mesa County has been strong over the last ten years, due to a relatively strong economy and job market. This 22.5% growth between 2002 and 2011 has begun to level off. The County’s unemployment rate is 10.3% compared to the state of Colorado’s 8.5% as of June 2011. The average residential sales price for homes sold in Mesa County has declined 15.5% to $169,000 since 2009. Per capita income in Mesa County is lower than the state average, which is attributed to a reduction in oil and gas development in the area (a major employment sector). Home ownership in the surrounding area is about 63%, with 30% renter-occupied and 6% vacant housing. The racial make-up of the area consists of around 80% white, 15% Hispanic, and 1-2% each of black, Asian, Native-American, and mixed-race citizens.

Catchment Area

The catchment area for Nisley Elementary is a 3 square-mile boundary delineated by Patterson Road and the county line to the north, North Avenue to the South, 30 Road to the east, and N. 12th Street to the west. This boundary contains a population of roughly 22,000 citizens. The surrounding neighborhood is comprised of mostly single-family residences with some parcels for agricultural production.

Site Inventory

Existing Conditions:

Equipment & Materials

Nisley Elementary School’s grounds are well-maintained but are in need of some improvements to ensure a bright future for its students, staff, and community. Many of the play equipment pieces are outdated and lack visual interest. The postwar building style has been appended with an updated gym and cafeteria building, as well as with the installation of Bear Paw Park, a small grass area in the form of a bear paw in front of the school entrance. The buildings are adequate for the purpose they serve but the grounds could be improved to better reflect the values of the students and staff of Nisley Elementary.
### Safety

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

- Raised curbs around primary and intermediate play pits create a tripping hazard
- Loose gravel material in play pits can travel to adjacent walkways and create a slipping hazard
- Basketball courts at the intermediate play area are cracked and uneven, creating a tripping hazard
- The basketball courts in the primary play area are very close to the foursquare and jump-rope area, which can cause unintentional accidents
- Vandalism is apparent on the north side of the site where the perimeter fence has been repeatedly cut and peeled open

### ADA Accessibility

Most of the school grounds and play areas are ADA accessible. However, the material used within the primary and intermediate play pits, a loose sand/pea gravel mix, does not comply with ADA accessibility standards. The concrete curbs surrounding the play pits are also prohibitive of wheelchair access, which can be resolved by including ADA ramps.

### Existing Landscape Conditions

The front of the school at Nisley Elementary provides an appealing entry with a manicured park (Bear Paw Park) and several shade trees. The remainder of the site, however, lacks trees that provide shade for students and staff during recess and PE activities. The school currently maintains a small garden within the causeway between the two front buildings. This area is already irrigated and has the potential to expand into a larger garden.

### Parking

Nisley Elementary has three main parking lots that provide parking for parents, faculty, staff, and visitors. These lots are located on the north and east perimeter of the site, which provide 95 stalls. An additional lot near the ECE build in the southeast corner provides 26 parking stalls.

### Maintenance

Nisley Elementary’s grounds are well-maintained by the district facilities department.

### Drainage

Several areas within the school’s grounds exhibit poor drainage that limits the use of these spaces during rain and snow events. One area lies within the lawn adjacent to the school’s track in the northwest corner of the site. This area is frequently used for football and soccer games and would greatly benefit from improved drainage. Another area with poor drainage sits in the center of the site within the lawn area adjacent to the primary play area. This area is shared by both primary and intermediate age groups and should be addressed in the master plan.
Playground Assessment:

The playground at Nisley Elementary School consists of three main areas: the primary play area south of the main school entrance, a large grass area with a track in the center of the grounds, and an intermediate play area on the west side of the gymnasium building.

The primary play area consists of two play pits measuring 8,800 square-feet together. These areas are filled with loose gravel that is not ADA compliant and not very supple as a safety surface. The raised curbs at the play pits limit access and can create a tripping hazard. The play structures within are a mix of old and new components. The newer components are located in the smaller play pit which has a shade canopy overhead and a perimeter fence around it. This fence is no longer necessary and sometimes inadvertently locks students inside. The larger play pit contains outdated swings, monkey bars, balance beam, and a whimsical climbing structure resembling a worm or a spider. Both pits will require additional ADA access ramps and an accessible safety surface. To the north of the play pit is a 9,000 square-foot asphalt pad with basketball courts, foursquare, and a jump-rope area. This space is very tight and causes frustration between students participating in either of the activities. There is another concrete pad north of the gymnasium that hosts tetherball, wall ball, and a map of the United States. The major problem with this intermediate play area is that the active spaces are disjointed which makes continuous play and careful observation difficult.

The second area consists of a 65,000 square-foot grass field that is shared between the primary and intermediate age groups. This lawn is used frequently for soccer and football games during recess. Although the field is large, it cannot be utilized to its full extent because of issues with visibility toward the south side of the field. Observing teachers do not allow student past a certain point which limits the spaces potential for activities. The adjacent track, which measures ¼-mile is well-used and in need of some containment to keep the crusher fines in place.

The third play area consists of a lawn area, intermediate play pit, and two lawn areas in the northwest corner of the school grounds. The 6,000 square-foot play pit has six structures that are mostly outdated: two parallel bars, arched monkey bars, straight monkey bars, swings, and an overhead ring climber. The ring climber is relatively new and colorful, but the remaining components are not as colorful or inviting. South of this pit is a 5,400 square-foot asphalt pad with basketball and foursquare courts on it. This space is very tight and causes frustration between students participating in either of the activities. There is another concrete pad north of the gymnasium that hosts tetherball, wall ball, and a map of the United States. The major problem with this intermediate play area is that the active spaces are disjointed which makes continuous play and careful observation difficult.
Playground Assessment

EXISTING CONDITIONS PLAN
NISLEY ELEMENTARY

Nisley Elementary

Presented by:

2011 University of Colorado at Denver

Hardscape
Softscape
Buildings
Parking Area

Gravel Area
Track
Pooling Area
Trash Area
Snow Storage
Trees

Swings
Basketball Courts
Gym/Cafeteria
28 3/4 Road
Texas Ave.

Fence at play structure no longer necessary, students can get locked-in
Raised curbs around play areas create tripping hazard; students sometimes dig tunnels under
Field used for football and soccer
Basketball court surface is uneven
Foursquare and Basketball Courts are too close together and often creates a problem
South-facing wall gets very hot during summer
Fence frequently cut for short-cut through lot
Storage Shed
Bike Rack
Existing garden planter, could be expanded

Key

1. Slides
2. Wide Slides
3. Swings
4. Climber
5. Horizontal Ladder
6. Horizontal Bars
7. Fire Pole
8. See-Saw
9. Merry-Go-Round
10. Balance Beam
11. Spring Toy
12. Travel Rings

Equipment Type
Factor Multipliers

Number of Seats
per 4 feet of edge
3 0

Number of Pieces of Equipment
Present
Number of Pieces of Equipment 10 years or older
Number of Children Accommodated

1/4-mile Running track used by girls-on-the-run program
Imaginary line separating intermediate and primary age groups
Fence no longer necessary, students can get locked-in
Raised curbs around play areas create tripping hazard; students sometimes dig tunnels under

Play Area Enlargements

INTERMEDIATE PLAY AREA

Primary Play Area

EXISTING CONDITION PLAN

1. 1.2. 2. 3. 4.

1. 2. 3.

4.

5.

6.

5. 6. 7.

3.

4. 5. 5. 6. 7.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

# of Surveys Received
Comments:
Section Three

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

The Nisley Elementary Design Advisory Committee played an integral role in the active play areas planning process. The committee, comprised of the principal, staff, parents, and community members, provided valuable input regarding needs and desires of the Nisley schoolyard.

Advisory Team Process

The design committee gathered input from Nisley students through the administration of photo surveys. Learning Landscape staff synthesized the information provided by the committee to develop drafts of the schoolyard master plan and the design advisory committee provided feedback on iterations of the plan. This collaborative effort allowed the school to develop an active play areas master plan to reflect the history, culture and curriculum unique to Nisley Elementary School.

Constituent Concerns, Needs, and Desires

Concerns:
- Not enough swings
- Need more seating areas
- Supervision of disconnected play areas is difficult for staff
- South-facing classrooms near primary play courts get very hot from sun exposure
- Drainage issues in fields near primary and intermediate play areas
- Raised curbs around play pits are not accessible and create a tripping hazard
- New playground should be free of hiding spaces that might attract illicit behavior

Needs:
- Shade structure or additional trees to provide shade for students and teachers during recess and PE classes.
- Age-appropriate and updated play equipment
- Spread out activities to alleviate tight spaces
- Drinking fountains at each play area

Desires:
- Workout stations/ circuit training along track
- More tetherball
- Artistic elements to promote a sense of ownership
- More digging activities
- Visible boundary between primary and intermediate play areas
- Hopscotch
- Play equipment that incorporates the use of imagination
- Outdoor classroom near trees adjacent to Texas Ave.
- Incorporating climbing elements with an easy way down (connected to a slide)

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:

"Nisley Elementary will create a safe, colorful and inviting play area to become a valuable amenity for the school and its surrounding 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 school mascot, school colors, student art, and other elements that students can be proud of.

Wish List:
- Shade structure
- Outdoor classroom
- Expanded garden
- Stabilize track with crusher fines sealant
- Amphitheater/Outdoor classroom with water and drainage for outdoor science instruction
- Regulation soccer or baseball fields to provide space for local leagues and provide the school with usage fee income

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.
**Preferred Landscape Plan**

**Nisley Elementary School**

- **Asphalt/Concrete**
- **Proposed Grass**
- **Garden Area**
- **Sand Area**
- **Gravel Area**
- **Parking Area**
- **Shade Structure**
- **Community Gateway**
- **Proposed Trees**

**Key**

- **Primary Play Area**
- **ECE Area to Revise**
- **Expanded Primary Play Area**
- **Shade Trees at Intermediate Rest Areas along Track**
- **EXISTING BEAR PAWS TO BE RE-PAINTED AND EXTENDED**
- **EXISTING FENCE TO BE REMOVED**
- **EXISTING GEAR PANS TO BE RE-PRINTED AND EXTENDED**
- **Primary Gateway**
- **Shanker Poles with Student Artwork**
- **Upgraded Primary Play Area**
- **Banner Poles with Student Artwork**
- **EXISTING FENCE STRUCTURE**
- **EXISTING SCHOOL GARDEN**
- **Expanded School Garden**
- **Outdoor Classroom/Outdoor Lunch Area**
- **Secondary Gateway**
- **Wall Ball Courts**
- ** existing shed**
- **Existing Map**
- **Texas Ave.**
- **28 3/4 Road**

**Master Plan**
Nisley Elementary Active Play Areas Master Plan Description

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

1. Age-Appropriate Play Equipment
The existing play equipment at Nisley is mostly old and outdated. This equipment is not appropriately suited to meet the needs of different age groups or students with special needs. The proposed plan maintains the location of the existing play structure areas to keep the cost down, but maximizes the use of each space with areas designated for the needs of different age groups; primary (grades K-2) and intermediate (grades 3-5). The new equipment will not only be safer than the existing structures, but challenge the students to test their coordination, balance, and strength in a colorful and alluring setting.

2. Expanded Asphalt with Games and Activities
Much of the ground surface of the existing schoolyard is cracked asphalt that limits the variety of available activities for recess and PE. Adding more asphalt surface will enlarge the playground with colorful ball courts, games, and educational elements. The expanded play surface will allow for a more even distribution of play activities, and therefore students, throughout the grounds.

3. Shade Structure/ Shade Trees
The current play area at Nisley lacks adequate shade for its warm, sunny climate. Shade structures will provide additional seating to cool down on hot days, a comfortable vantage point for teachers on recess duty, and can also promote the school’s identity through its design. There are many mature trees in the front of the school, but there is almost no shade within the existing play areas. Adding new trees will increase shade areas and places for students and the community to cool down on hot days. New trees will also break up the large space of the existing playground with vertical elements and add visual interest with seasonal color change.

4. Outdoor Classroom
An outdoor classroom space was highly desired by the teaching staff at Nisley. The design team chose to place the outdoor classroom near the front of the school to allow for quiet instruction separate from the active play areas behind the school. The new classroom will also provide a gathering area with shade trees for community meetings and the back-to-school barbeque.

5. Community Garden
The incorporation of a school garden has been proven to improve students’ healthy eating habits and understanding of where food comes from. Adding a community garden to the grounds and Nisley will promote healthy eating habits and bolster a sense of student pride through the cultivation and harvesting of fresh fruits and vegetables.

6. Community Gateway(s)
Community gateways acts as an entrance to the school grounds and a landmark to promote a sense of pride and identity for the students, faculty and staff. The gateways at Nisley will be located at the Southeast side of the entrance, and North of the cafeteria which is a frequently-used access point for students entering the playground after lunch.

7. Recreation/Soccer Fields
The large grass field south of the school is currently underutilized. Re-grading and adding designated areas will allow for the incorporation of regulation-sized soccer/practice fields. This will allow Nisley the opportunity to utilize the space during gym and also host local league games, which will generate revenue for the school district through use fees.
Section Four

- Cost Estimate
- Resources
- Acknowledgements
Nisley - Active Play Areas Master Plan

**Option III: Estimate of Probable Landscape Costs**

This estimate includes the renovation of the primary and intermediate play structure areas, asphalt repair & replacement, hard surface games and site furnishings at both play areas. It also includes a primary and secondary gateway feature, shade structure and outdoor classroom, stabilized track surface and grading and re-sodding fields.

### Preliminary Cost Estimate

<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>Climbing Structures</td>
<td>LS</td>
<td>$5,000.00</td>
<td>2</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Primary Play Equipment installed</td>
<td>LS</td>
<td>$40,000.00</td>
<td>1</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>Intermediate Play Equipment installed</td>
<td>LS</td>
<td>$40,000.00</td>
<td>1</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>Swings (3 bay 6 seat)</td>
<td>LS</td>
<td>$4,000.00</td>
<td>2</td>
<td>$8,000.00</td>
</tr>
<tr>
<td><em>(Pending final costs)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$98,000.00</td>
</tr>
<tr>
<td><strong>Play Surfacing (12” EWF Delivered/Installed)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Play Area</td>
<td>SF</td>
<td>$2.50</td>
<td>7,044</td>
<td>$17,610.00</td>
</tr>
<tr>
<td>Intermediate Play Area</td>
<td>SF</td>
<td>$2.50</td>
<td>7,100</td>
<td>$17,750.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$35,360.00</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>$29.00</td>
<td>30</td>
<td>$870.00</td>
</tr>
<tr>
<td>Concrete Flatwork, 6” depth</td>
<td>SF</td>
<td>$4.00</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Concrete Mow Band, 8”x6”</td>
<td>LF</td>
<td>$11.00</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Concrete Curfwall @ play pits</td>
<td>LF</td>
<td>$20.00</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Concrete Ramp at Play Pits</td>
<td>EA</td>
<td>$800.00</td>
<td>4</td>
<td>$3,200.00</td>
</tr>
<tr>
<td>Concrete Stairs</td>
<td>LF</td>
<td>$37.00</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$4,070.00</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>LS</td>
<td>$20,000.00</td>
<td>1</td>
<td>$20,000.00</td>
</tr>
<tr>
<td>New Asphalt, 4” depth</td>
<td>SF</td>
<td>$1.80</td>
<td>12,882</td>
<td>$23,187.60</td>
</tr>
<tr>
<td>Reconditioned seal existing</td>
<td>SF</td>
<td>$0.95</td>
<td>10,610</td>
<td>$10,075.50</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>5</td>
<td>$750.00</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>2</td>
<td>$800.00</td>
</tr>
<tr>
<td>4-Square Striping</td>
<td>EA</td>
<td>$250.00</td>
<td>6</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Grizzly Bear Footprints</td>
<td>LS</td>
<td>$1,000.00</td>
<td>1</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Painted Line-Up Lines</td>
<td>LS</td>
<td>$200.00</td>
<td>5</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Wall-ball Court Striping</td>
<td>EA</td>
<td>$250.00</td>
<td>2</td>
<td>$500.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$6,710.80</td>
</tr>
<tr>
<td><strong>School Design Elements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor Classroom/ Lunch Area</td>
<td>EA</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Shade Structure</td>
<td>EA</td>
<td>$25,000.00</td>
<td>1</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>Gateway Feature (Primary)</td>
<td>LS</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Gateway Feature (Secondary)</td>
<td>LS</td>
<td>$3,000.00</td>
<td>1</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Banner Pole and Banners</td>
<td>EA</td>
<td>$900.00</td>
<td>3</td>
<td>$2,700.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$52,700.00</td>
</tr>
</tbody>
</table>

### Nisley - Active Play Areas Master Plan

#### Running Track
- **Crusher Fines, 4” WIDE X 4” depth**
  - SF: $1.00
  - Subtotal: $1.00
- **Crusher Fines Stabilizer**
  - SF: $1,200
  - 19,600
  - $32,520.00
- **Steel Edging**
  - LF: $3.00
  - 2,350
  - $7,050.00
  - **SUBTOTAL**
  - $30,570.00

#### Site Furnishings, Athletic Equipment and Misc.
- **Prox Table @ lunch area**
  - EA: $1,000.00
  - 3
  - $3,000.00
- **Trash Receptacle**
  - EA: $650.00
  - 2
  - $1,300.00
- **6’ Bench**
  - EA: $850.00
  - 2
  - $1,700.00
- **Basketball Goal**
  - EA: $1,200.00
  - 4
  - $4,800.00
- **Tetherball Poles**
  - EA: $350.00
  - 5
  - $1,750.00
- **Permanent or Moveable Soccer Goals**
  - EA: $1,000.00
  - 2
  - $2,000.00
  - **6’ Chain Link Fence @ Intermediate Play Area**
  - LF: $25.00
  - 45
  - $1,125.00
  - **SUBTOTAL**
  - $15,875.00

#### Landscape Planting and Irrigation
- **Shrub Bed Soil Prep**
  - SF: $0.30
  - 0
  - $0.00
- **Sod and Soil Prep @ field and play areas**
  - SF: $0.55
  - 63,000
  - $34,650.00
- **Irrigation, shrub beds**
  - SF: $0.76
  - 0
  - $0.00
- **Irrigation, sod areas**
  - SF: $0.55
  - 0
  - $0.00
- **Irrigation, tree bubblers**
  - EA: $600.00
  - 12
  - $7,200.00
- **Shade Tree, 3” caliper**
  - EA: $400.00
  - 5
  - $2,000.00
- **Deciduous Ornamental Tree, 2.5” caliper**
  - EA: $100.00
  - 3
  - $300.00
- **Boulder-field**
  - EA: $150.00
  - 12
  - $1,800.00
- **Shredded Mulch, 4” depth**
  - SF: $1.20
  - 0
  - $0.00
  - **SUBTOTAL**
  - $41,075.00

#### Community Vegetable Garden
- **Soil Amendment**
  - CY: $35.00
  - 15
  - $525.00
- **Concrete mow band, 8”x6”**
  - LF: $11.00
  - 160
  - $1,760.00
- **Chain Link Fence**
  - LF: $20.00
  - 40
  - $800.00
- **Chain Link Gate, 4” width**
  - EA: $350.00
  - 1
  - $350.00
- **Irrigation**
  - EA: $1,500.00
  - 1
  - $1,500.00
- **Compost Storage & Accessories**
  - EA: $1,000.00
  - 1
  - $1,000.00
  - **SUBTOTAL**
  - $6,155.00

### Site Improvements Total
- $242,319.10

### Project Start Up
- **Typical construction mobilization**
  - $10,000.00
  - $10,000
- **Infrastructure**
  - $10,000.00
  - $10,000
- **Demolition**
  - **Typical Demolition**
    - $25,000.00
    - $25,000
  - **Architecture Engineering and Coordination**
    - **8% of construction cost**
      - $27,385.53
      - $27,385.53
    - **Owner Representative Fees**
      - $17,115.96
      - $17,115.96
    - **10% of construction cost**
      - $34,231.91
      - $34,231.91

### Project Grand Total
- **W/ Additions**
  - $742,292.49
Resources

Acknowledgements
Colorado Health Foundation Staff, students and parents at: Nisley Elementary School Mesa County Valley 51 District Administration David Montoya, Mesa County Valley 51 Facility Maintenance Sonda Dalton, Mesa County Valley 51 District Wellness Coordinator University of Colorado Denver

University of Colorado Denver College of Architecture and Planning Colorado Center for Community Development Learning Landscapes Professor Lois Brink Executive Director Cate Townley Community Outreach Coordinator Chris Schooler Senior Research Associate Graduate Student Interns: Nathan Bishop Patrick Healy Anthony Pozzuoli