



Lamar School District RE-2  
Learning Landscapes

MASTER PLAN



Fall 2012

Washington Elementary



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# Section One

# 1



## Executive Summary

- Introduction
- Lamar District RE-2 Background
- Master Plan Intent and Process
- Recommendations
- Learning Landscapes Background



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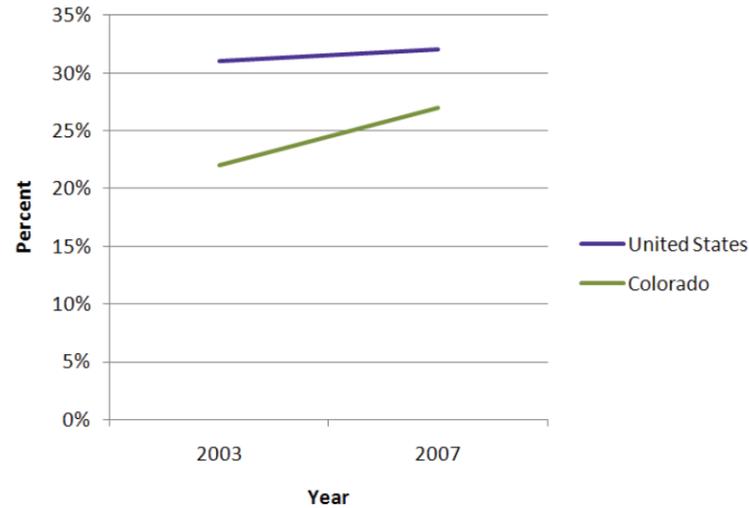


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### Introduction

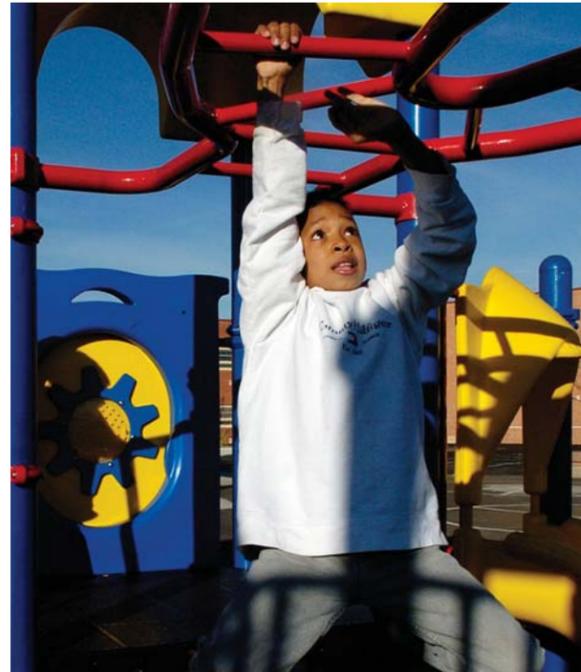
Schoolyards provide an opportunity for the built environment to promote increased physical activity for children and the surrounding community. In addition, studies show that well-planned and equipped schoolyards increase physical activity while also enhancing the learning environment resulting in improved 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.

#### Children Who Are Overweight or Obese



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

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In the spring of 2012, Lamar School District RE-2 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 a child’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 active play areas master plans for six schools within the Lamar School District RE-2.



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 in Denver and the greater rocky mountain region, the success of this program is founded on a mutual respect between aesthetic, safety, maintenance, and health 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.

CHF Vision:

Colorado will become the healthiest state in the nation.

CHF 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.



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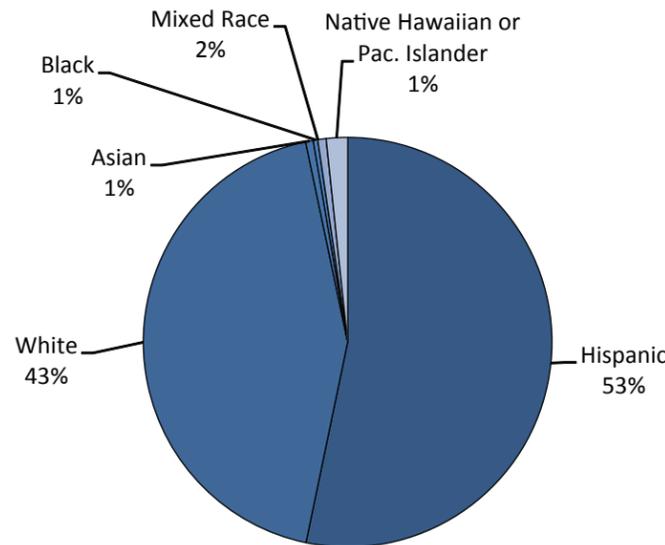
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Total Enrollment: 1,667

- 0.7% American Indian/Alaskan Native
- 0.4% Asian
- 0.6% Black
- 53.3% Hispanic
- 43.4% White
- 0.0% Native Hawaiian/Pacific Islander
- 1.7% Two or more

**Lamar District RE-2 Demographics**



which houses a fitness center offering traditional weight room facilities, aerobics and zumba classes, and yoga.

In 2009, the Colorado Department of Education awarded a school wellness grant to the Lamar School District RE-2. This grant awarded \$50,000 per year for the course of three years to support coordinated improvements to the counseling, health education, PE, nutrition, and health services programs in all of the district's schools. This award also allowed for the hiring of a district-wide health and wellness coordinator, Angel Sneller, who has been working to improve health education and physical education through curriculum expansion as prescribed by the district wellness policy.

A recent publication of the Prowers County Public Health & Environment Annual Report lists obesity among its "winnable battles" as described by the U.S. Department of Health and Human Services. The report notes that "creating healthier environments is a good starting place. When children have safe places to walk, bike, and play in their neighborhoods, they're more likely to be active and less likely to become obese." (www.prowerscounty.net)

**Wellness**

Lamar's rural setting lends itself to a population with a strong work ethic and an appreciation for the outdoors. Lamar's Parks Department offers a range of activities for residents of all ages, and maintains about 109 acres of developed parks and public lands and 1.4 miles of trail. The Recreation Department offers recreational activities at the Lamar Community Building

**Lamar School District RE-2**

Lamar School District RE-2 is the 54<sup>th</sup> largest out of 183 districts in Colorado, with 1,667 students. The district has six schools: one preschool, two elementary schools, a K-6 charter school, and a middle and high school.

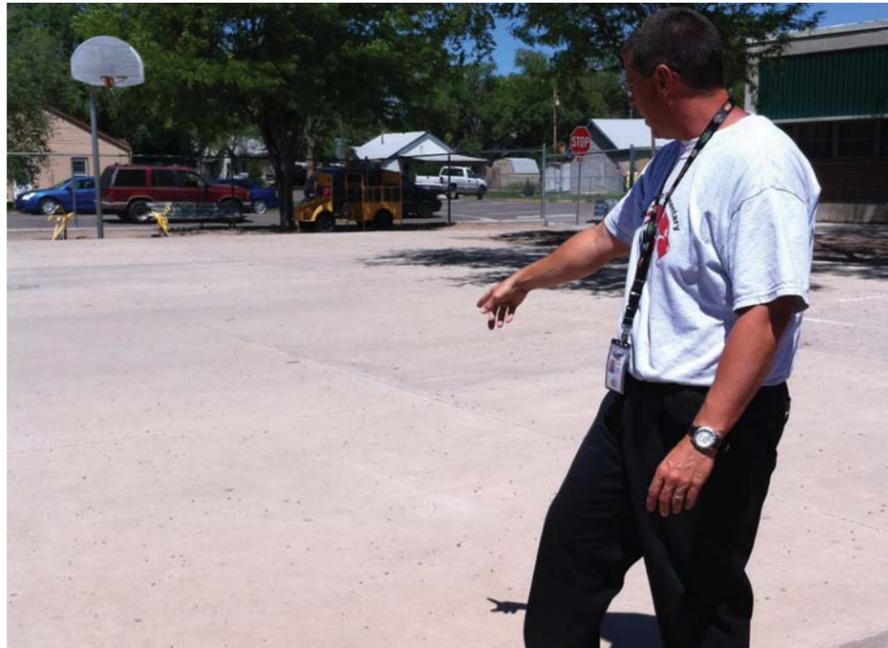
The mission of Lamar School District Re 2 is to provide, within a safe environment, meaningful opportunities, experiences, and guidance combined with high expectations that will enable each life-long learner to be a moral, ethical, responsible, and productive member of society. (<http://www.lamar.k12.co.us>)

Lamar School District RE-2 is representative of many cultures. The largest racial demographic groups are Hispanic (53.3%), and White (43.4%), with additional representation from Asian, Black, American Indian and mixed-race students.

**Intent of the Play Areas Master Plan**

The master plans for each school are intended to serve as a roadmap for developing strategies and tactics needed to create an inviting, safe and active play area to increase activity and improve the health of students and surrounding community members. The purpose of the master plan is for the selected schools from the Lamar School District RE-2 to be strategically poised to capture opportunities to improve and expand outdoor/ play areas as funding becomes available. The master plan is intended to be used 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



At the school level the collaborative process was guided by each school's design 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 Lamar School District RE-2 in accordance with its mission statement.



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 April to October 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.



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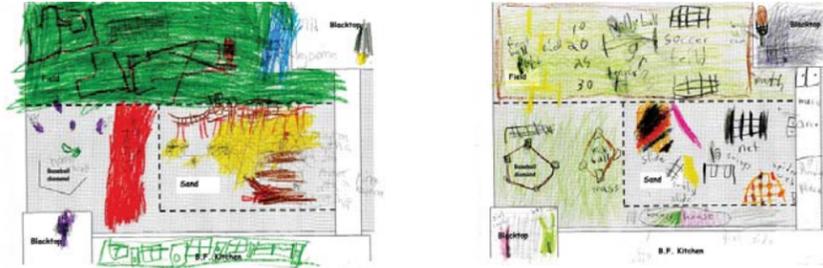


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The planning process consisted of the following tasks:

- 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



Example of Student Drawings depicting "My Dream Playground"

**Recommendations**

Improved play facilities will serve multiple purposes in not only engaging Lamar School District RE-2 students, but the entire community. The following are recommendations for implementation of the Active Play Areas Master Plan at Lamar School District RE-2's schools.

- 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, and to enliven the existing active spaces.
- 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.
- Incorporate a Vegetable Garden
  - Involving a garden in the learning curriculum can promote healthy eating, community stewardship, educational opportunities, and food literacy.
- Develop Outdoor Learning Environments
  - Incorporate educational charts, graphs, and graphics within the schoolyard to promote continuous learning even during recess activities.
- 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.

- 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.



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**Learning Landscape History**

The first Learning Landscape was built at Bromwell elementary school in 1998 as a result of a six-year collaboration of parents, elementary students, staff, faculty, neighbors, local businesses and University of Colorado Denver (UCD)



landscape architecture graduate students. The vast expanse of asphalt and pea gravel on the Bromwell playground resembled a prison yard, not an environment encouraging activity and child development.

Bromwell parents and community members took action to transform the schoolyard into an active and aesthetically pleasing place for learning and physical activity.

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

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

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

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

**What We Do:**

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

**How We Do It:**

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

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

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

**Community Involvement**

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



Outdoor Art



Gateways



Climbing Structures



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

**Learning Landscapes** are comprised of grass playing fields, age-appropriate play equipment, trees, shade structures, gateways, artwork, outdoor classrooms, gardens, traditional play elements and non-traditional play elements.

Shade Structure



Grass Fields



Outdoor Classroom



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

**Educational Elements** tend to be focused on the unique curriculum of each school. Educational elements also tend to be derived from the schools theme, mascot, motto, etc. These components come in the 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.

Habitat & Vegetable Garden



Age Appropriate Play Equipment



Maps & Hard Surface Games



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## Section Two

# 2



- School Background
- Existing Conditions
- Playground Assessment



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*Neighborhood Context*

Washington Elementary School is located near Lamar’s city center on the west side of Main St. This area serves as a neighborhood hub for events and activities due to its proximity to Savage Stadium and the Lamar Community Building. Additionally, the community utilizes Washington’s playground as a neighborhood park space since many residents are hesitant to cross Main St. where two city parks are located.



*School Demographics*

Fall 2011 Enrollment: 324

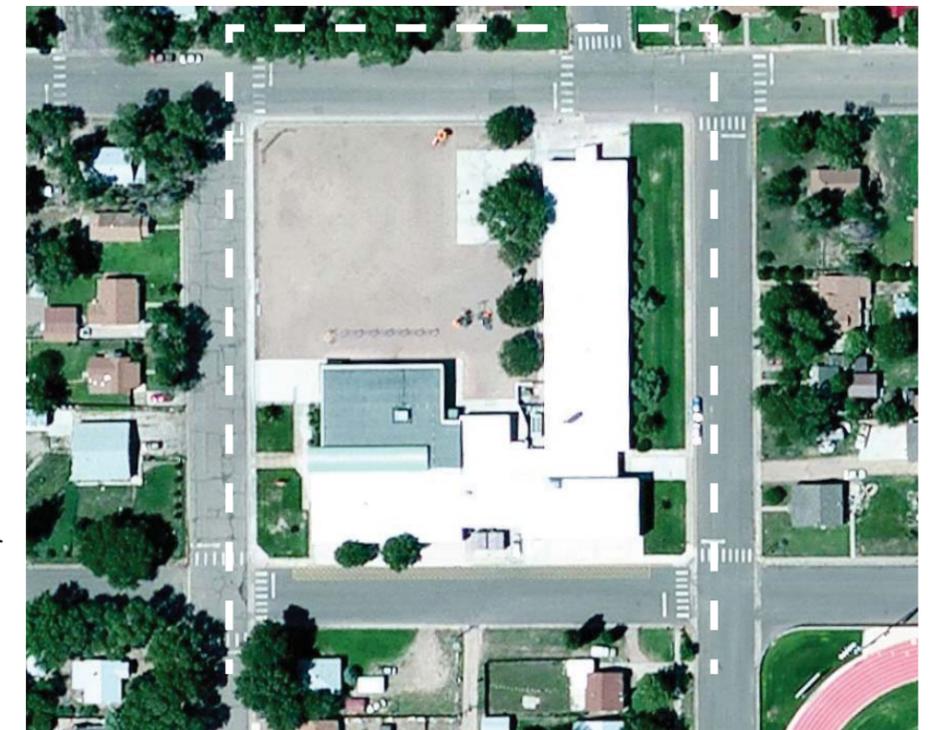
Male Students: 181

Female Students: 143

Free/Reduced Lunch: 79.3% of students

*Racial Make-up of Alta Vista Students:*

|       |                                  |
|-------|----------------------------------|
| 0.6%  | American Indian/Alaskan Native   |
| 0.3%  | Asian                            |
| 0.6%  | Black                            |
| 61.1% | Hispanic                         |
| 36.1% | White                            |
| 0%    | Native Hawaiian/Pacific Islander |
| 1.2%  | Two or more                      |



**School Background Information**

*Location and History*

Washington Elementary School is located at 510 S 9th Street in Lamar, CO. The school has 324 students in grades K through 2. In 2006, Washington Elementary was recognized as a Distinguished District I School within the Southeast region. The school colors are red and white, and the school mascot is the wildcats.

*School Mission:*

The mission of Washington Elementary School is harmonious with the mission of the overall Lamar School District Re-2: to provide, within a safe environment, meaningful opportunities, experiences, and guidance combined with high expectations that will enable each life-long learner to be a moral, ethical, responsible, and productive member of society.

The schools motto lies within the acronym “P.R.I.D.E:” Polite, Respect, Integrity, Determination, Engaged.

pes.lamar.k12.co.us

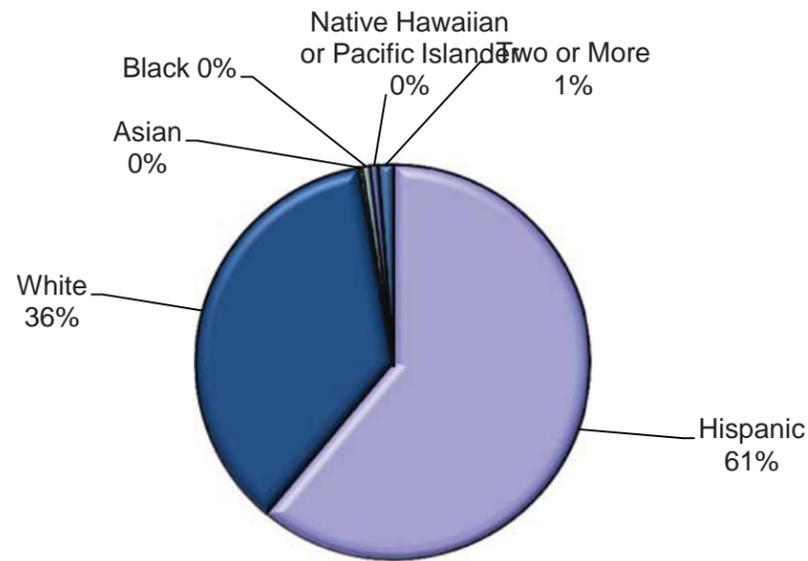
*Grade Distribution of Students:*

Kindergarten: 107  
 1<sup>st</sup> grade: 105  
 2<sup>nd</sup> grade: 112

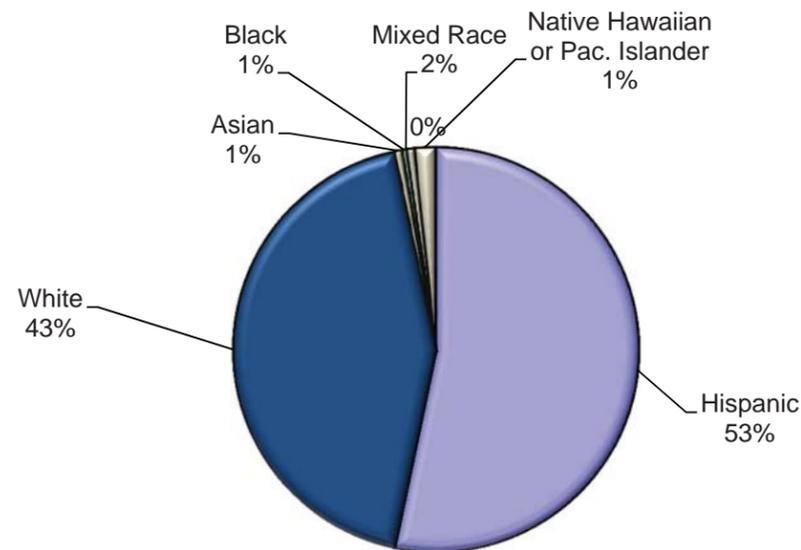
*Surrounding Area Demographics*

Washington Elementary School is located within the center of Lamar. The city of Lamar is the County seat of Prowers County with an area population of 12,551. Of these residents, the largest racial groups consist of whites at 81% and people of Hispanic origin at 16%. The median age for Prowers County is 36.7 and the median annual household income is \$28,660.

**2011 Washington Elementary Demographics**

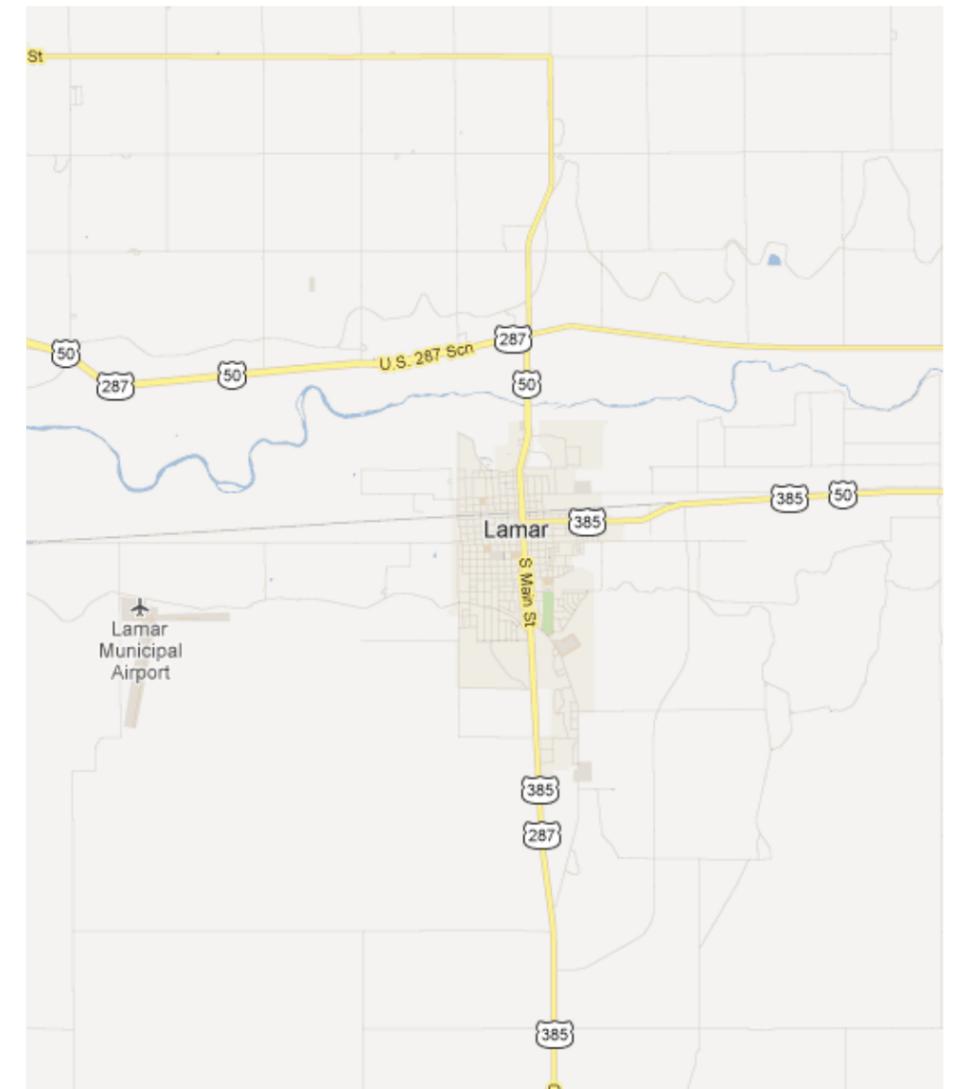


**District Demographics**



*Catchment Area*

The catchment area for Washington Elementary School reaches throughout the entire city of Lamar. This grade level system allocates all students between Kindergarten and 2<sup>nd</sup> grade to Washington Elementary, who then move to Parkview for grades 3-5. Some students choose to enroll at Alta Vista Charter School which has a lottery enrollment system for students in grades K through 6.



## Site Inventory

### Existing Conditions:

#### Equipment & Materials

Equipment and materials throughout the grounds of Washington Elementary vary greatly in age and condition. Some play structures are relatively new while others may have been original to the school's design. The surfaces outside are mainly a mixture of compacted soil/gravel and some concrete. These materials create safety risks when children inevitably fall on them.



#### ADA Accessibility

Accessibility at Washington Elementary School is a design aspect that has been incorporated into the building improvements, but could be improved on the playground. The play structures are not located in traditional curbed pits, which require a wheelchair ramp to provide access by code. But since the structures are located on a relatively loose gravel surface, accessing them by wheelchair would be challenging. Access into the playground space is accessible. The final design will integrate ADA accessibility to ensure universal access to playground structures and activities.

#### Drainage

The compacted gravel/soil surface of the playground generally does not drain well. This is evident in several areas where rainwater

typically collects. These areas include the space below the swings, the area north of the composite play structure, and within the main field space near the backstop. Increasing areas of permeable surfacing, such as planting beds and lawn could help alleviate drainage problems.

#### Safety

The following issues of safety were addressed by the design team during the meetings:

- o Lack of enough equipment/activities on playground leads to crowding and alternative (usu. more dangerous) activities.
- o Goathead weeds are a problem on the playground; they have thorns that can pierce skin and pop balls.
- o Uneven play surface leads to student injuries. This is especially clear at the edge of the basketball courts where the edge is exposed and causes a tripping hazard.
- o There is a need for clearer boundaries to separate activities and prevent injuries.



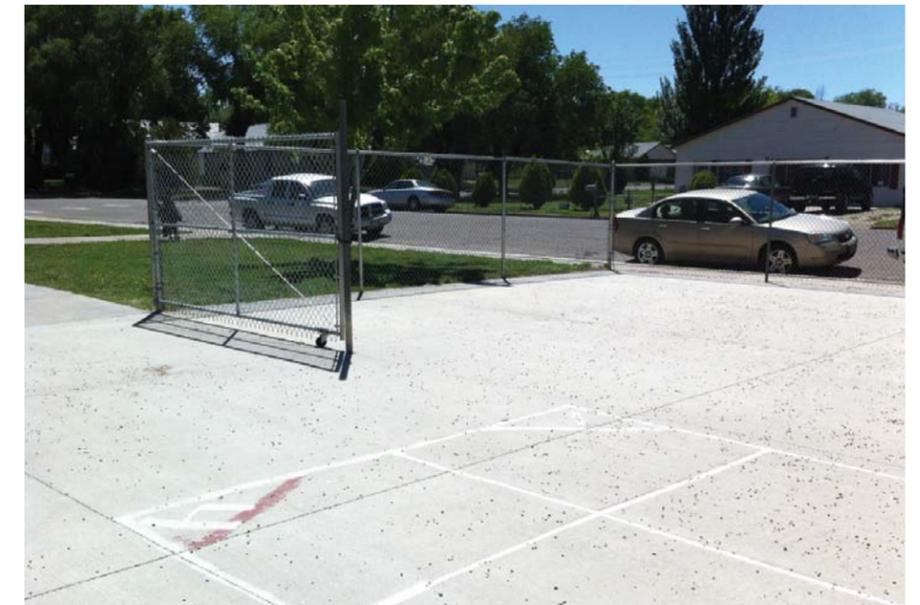
#### Circulation and Site Accessibility

#### Parking

Parking at Washington Elementary is available along the street on 9<sup>th</sup>, 10<sup>th</sup>, and S. Parmenter St. The school does not have a designated parking lot, but the need for more parking does not appear to be an issue.

#### Maintenance

Washington Elementary School's grounds are maintained by the district maintenance department. Plowing the hard gravel surface after snow is a major issue that the maintenance department faces. The goal for the new playground area is to incorporate hardscape, lawn and trees into the design in such a way to allow for easier maintenance. For example, the district has stopped using asphalt for hard surfaces and substituted concrete for its durability and longer life-span. Also, the district favors poured-in-place safety surfacing or the modular tile system over loose rubber fill or engineered wood fiber for their increased life-span.



**Existing Landscape Conditions**

The playground at Washington Elementary School is an active space that is well-used by its students and surrounding community members. The playground has many mature trees that provide shade to the east side of the space; a valuable asset that will be incorporated into the new design. Although much of the front of the school property along 9<sup>th</sup> and 10<sup>th</sup> St. are planted with trees and irrigated lawn, the majority of the playground space (25,400 SF) consists of bare soil. This open field of gravel and soil is unfortunately not a very inviting surface for active play.

**Playground Assessment:**

The playground at Washington Elementary School is an active space that is well-used by its students and surrounding community members. The majority of activities take place close to the buildings, which does not leave much room between them – a concern that has already been expressed. Along the southern edge of the playground are a few newer structures; a swing set and a circular monkey-bar climber. The swings are especially popular and have been expanded to 6 bays (12 swings) within the last two years. Additionally, there are



three hopscotch courts and a foursquare court situated on the southern edge of the playground on concrete. Two of the hopscotch courts are on a narrow walkway which limits circulation along this path.

Within the center of the playground lie a large composite play structure, a tetherball court, sandbox, and spiral-shaped slide. The composite structure was installed most recently – within the last 10 years- and has three platforms, two slides, a cargo net and several other climbing elements. The tetherball pole is located very close to the structure which creates crowding. The spiral slide and the sandbox are

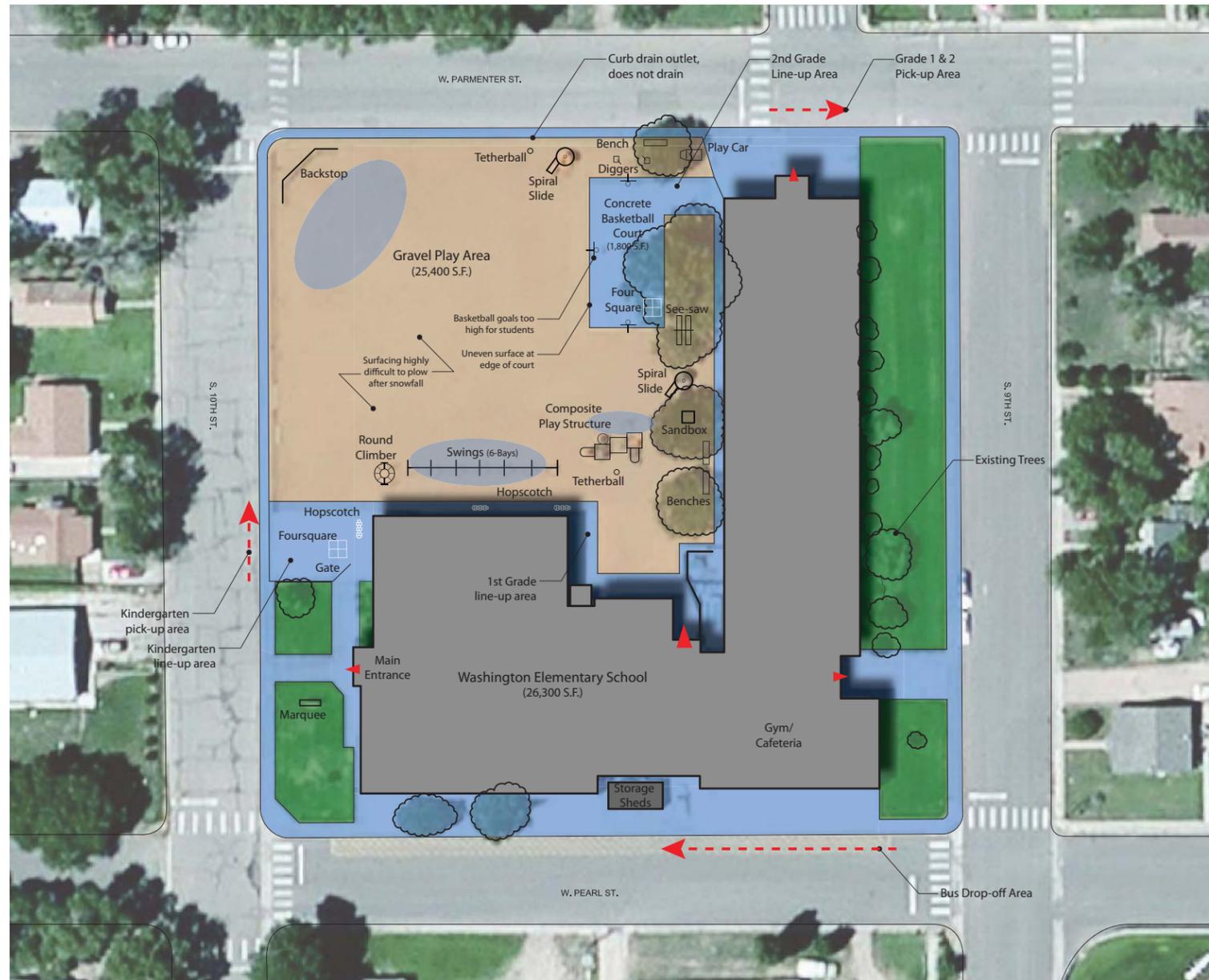


located beneath the row of trees on the east edge of the playground. The sandbox looks relatively new, but the metal slide is more than 10 years old, and shows signs of wear.

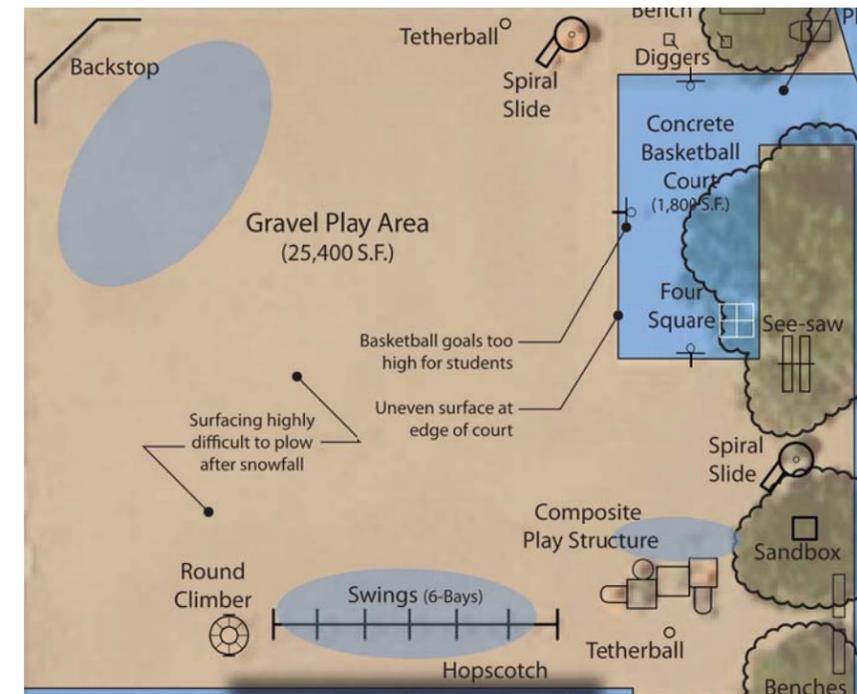
The northern section of the playground is occupied by a concrete court with basketball and foursquare, a set of two see-saws, a play car structure, two small digging structures, another spiral slide and a tetherball court. The concrete court is relatively recent and has three basketball goals and a foursquare court. The goals are too tall for many students and the edge of the court is not level with the gravel surface around it, creating a tripping hazard. The see-saws are also relatively

new, and are comfortably located in the shade. The older play car structure and two digging structures are located north of the concrete court, also under the shade of a tree. While the diggers are relatively new, the play car is an older structure. West of these structures is a vinyl spiral slide and a tetherball pole. The slide is relatively new. The tetherball is located on the gravel surface, and has no court





PLAY AREA ENLARGEMENT



| Item | Equipment Type    | Number of Pieces of Equipment Present |   |   | Number of Pieces of Equipment 10 years or older |   |   | Factor Multipliers                             |   |   | Number of Children Accommodated |    |   |
|------|-------------------|---------------------------------------|---|---|---|---|---|--|---|---|---------------------------------|----|---|
|      |                   | E                                     | P | I | E   | P | I | E  | P | I | E                               | P  | I |
| 1.   | Slides            |                                       | 3 |   |   | 1 |   | 2  |   |   |                                 | 8  |   |
| 2.   | Wide Slides       |                                       |   |   |   |   |   | 4  |   |   |                                 |    |   |
| 3.   | Swings            |                                       | 1 |   |   |   |   | Number of Seats                                |   |   |                                 | 12 |   |
| 4.   | Climber           |                                       | 3 |   |   |   |   | 1 per 4 feet of edge                           |   |   |                                 | 6  |   |
| 5.   | Horizontal Ladder |                                       | 1 |   |   |   |   | 3  |   |   |                                 | 3  |   |
| 6.   | Horizontal Bars   |                                       |   |   |   |   |   | 2 for long bar, otherwise use number of pieces |   |   |                                 |    |   |
| 7.   | Fire Pole         |                                       |   |   |   |   |   | number of pieces                               |   |   |                                 |    |   |
| 8.   | See-Saw           |                                       |   |   |   | 3 |   | 2  |   |   |                                 | 6  |   |
| 9.   | Merry-Go-Round    |                                       |   |   |   |   |   | 1 per 1.5 feet of diameter                     |   |   |                                 |    |   |
| 10.  | Balance Beam      |                                       |   |   |   |   |   | 2  |   |   |                                 |    |   |
| 11.  | Diggers           |                                       |   |   |   | 2 |   | Number of Seats                                |   |   |                                 | 2  |   |
| 12.  | Zip Line          |                                       |   |   |   |   |   | 3  |   |   |                                 |    |   |

- Key**
- Hardscape
  - Softscape
  - Gravel Area
  - Parking Area
  - Pooling Area
  - Snow Storage
  - Circulation
  - Doors

## Section Three

# 3



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



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delineation. This could be improved by relocating the tetherball to a resilient surface to allow for court striping.

**Design Advisory team**

The Washington Elementary School 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 Alta Vista schoolyard.



**Advisory Team Process**

The design committee gathered input from Alta Vista 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 Washington Elementary School.

**Constituent Concerns, Needs, and Desires**

Concerns:

- High winds and extreme solar exposure must be taken into account when selecting materials and activities.
- Basketball hoops are too tall for some of the students; a lower rim could be incorporated into the design.
- Plowing the hard gravel surface after snow is a major issue that the maintenance department faces.

Needs:

- Protection from the intense sun and wind.

- Safety surface around play/climbing structures.
- Age-appropriate play structures.

Desires:

- Incorporation of recently-acquired professional soccer goals for school/community use.
- Expanded activity space with additional play structure(s).
- Activity spaces that are spread out through the playground to reduce crowding.

**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:**

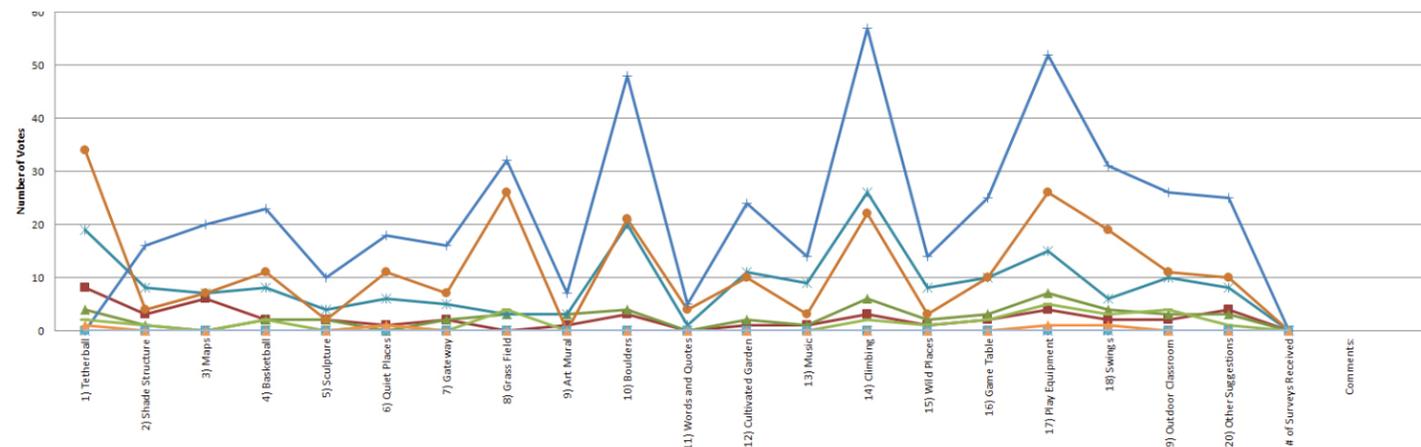
*"Washington Elementary School will create a safe, colorful and inviting play area to become a valuable amenity for the school and its surrounding community."*

**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
- Community Garden
- Crusher fines jogging track with shaded rest areas
- Outdoor classroom
- Regulation youth soccer field to provide space for students and local leagues



Example of photo survey

*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.



Example of Wordle



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An ordering system or theme to be used in customizing the play areas can be generated from Washington Elementary Schools local geography and climate. These images show the regional geography and local climate that could be shown graphically on a map, or within finer details of the school's custom features.



anthonyisd.net



hunting-in-romania.com



wikimedia.org

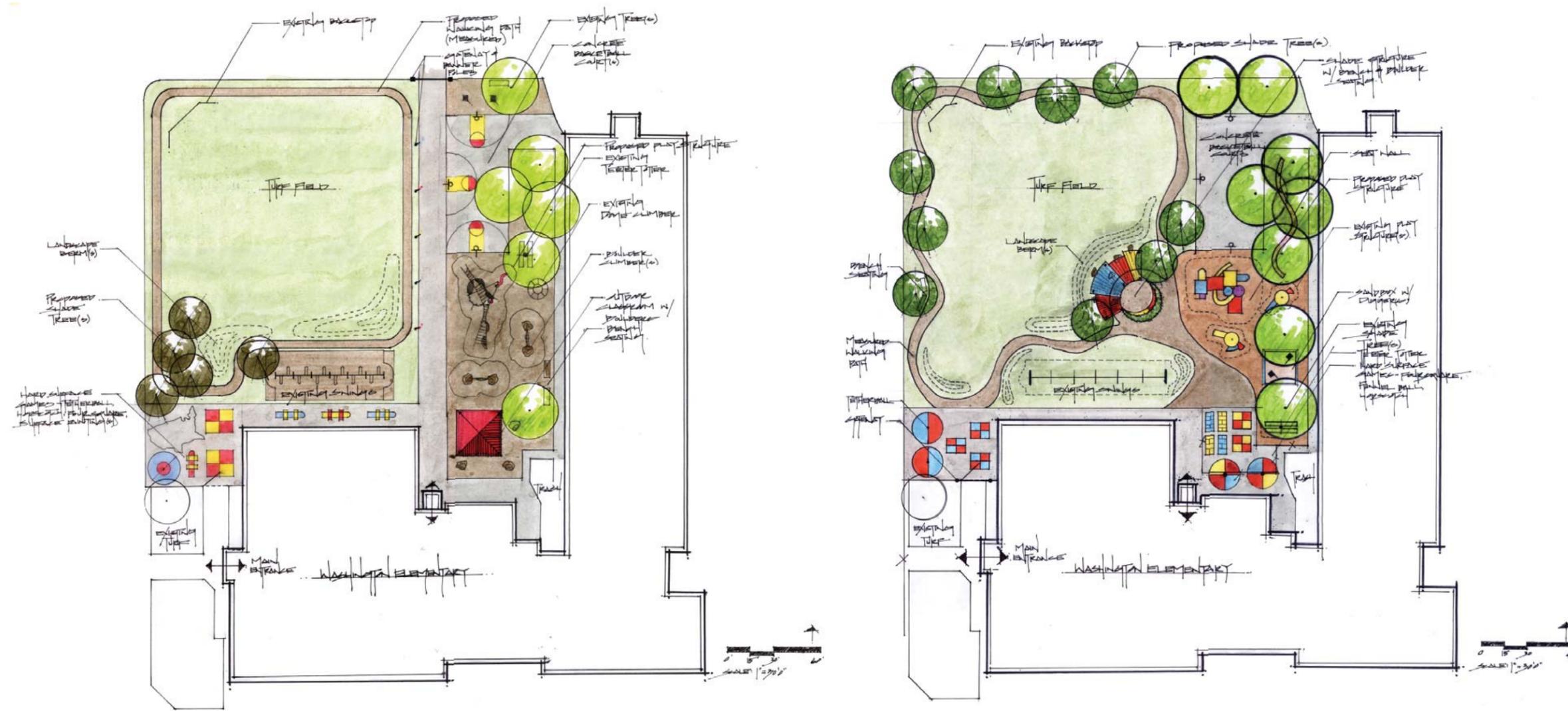


vwhiteportfolio.com

**Process Graphics:**

Learning Landscapes developed two conceptual layout plans and sent them to the design advisory team. Each plan shows different options for the layout and placement of certain items on the team's wish list. The placement of the gateway structure, outdoor classroom/shade structure, and play equipment varies slightly in between the plans.

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



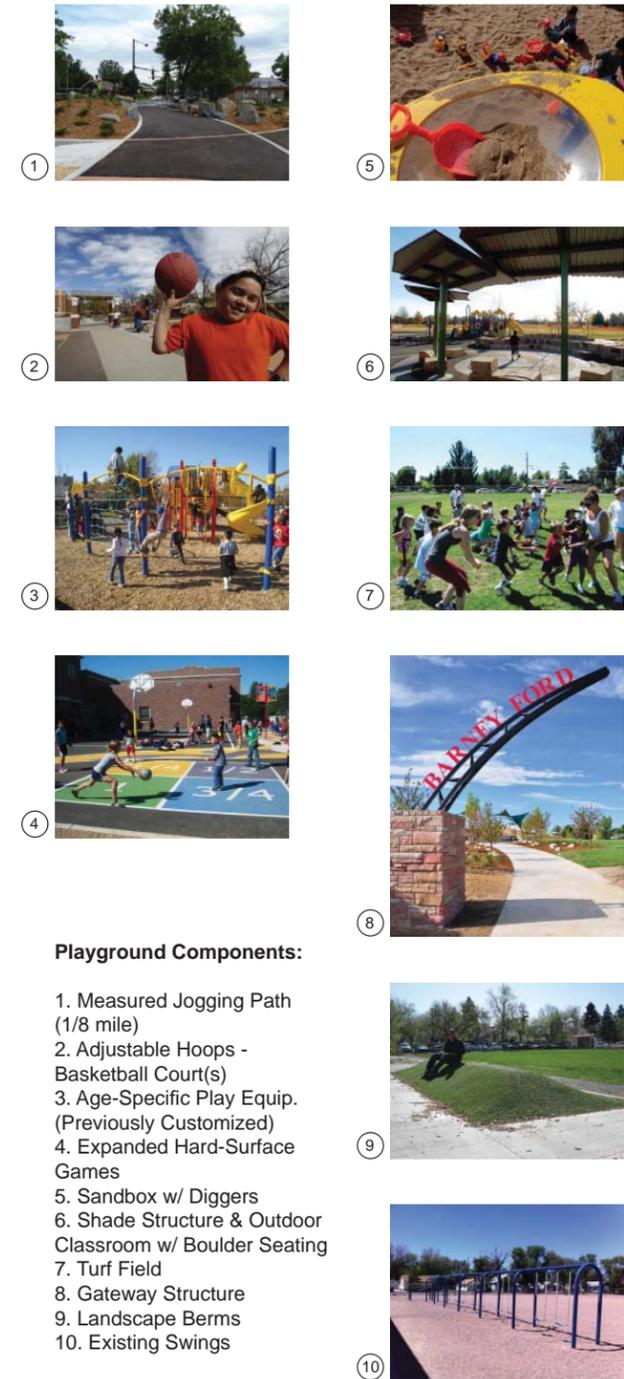
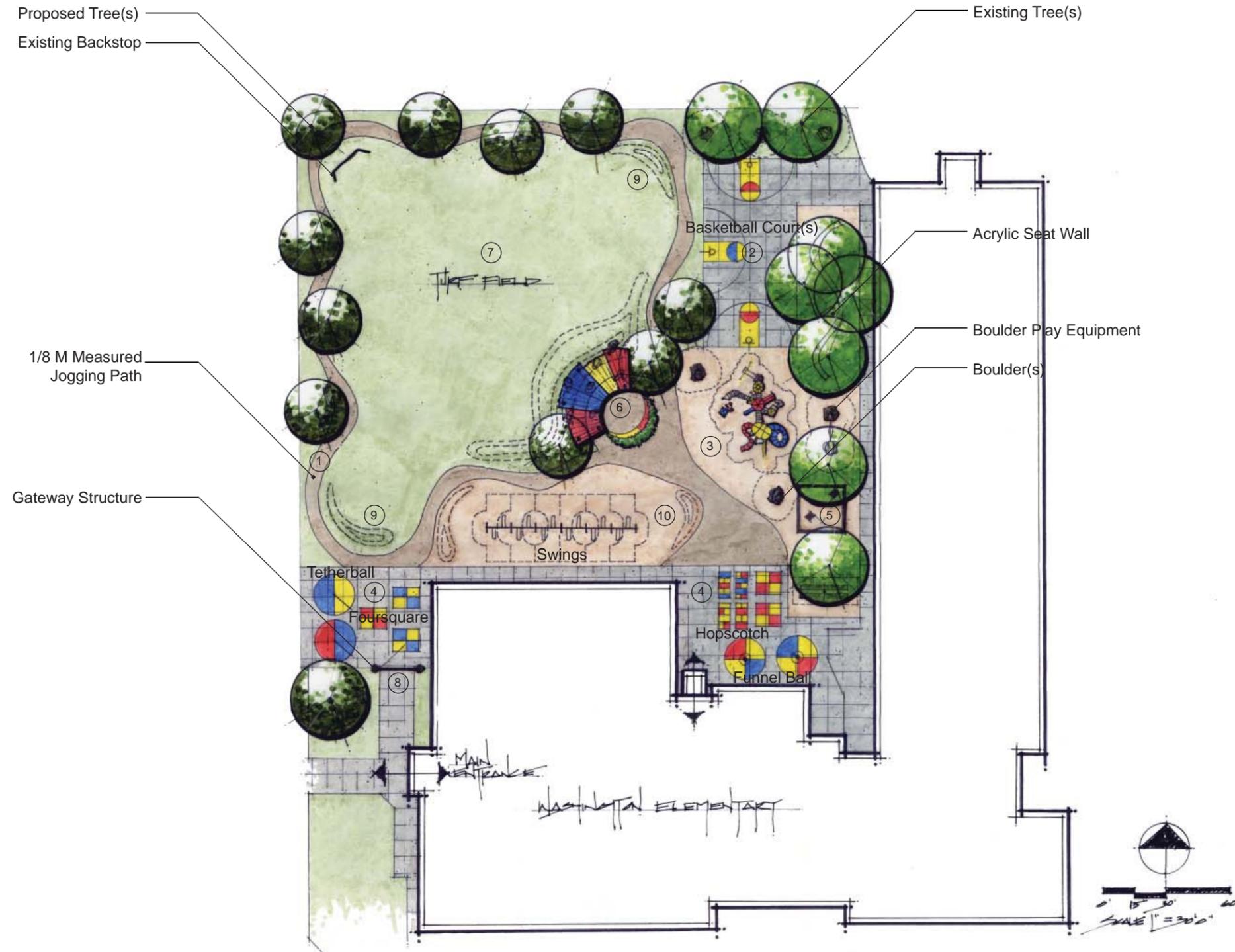
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**Playground Components:**

1. Measured Jogging Path (1/8 mile)
2. Adjustable Hoops - Basketball Court(s)
3. Age-Specific Play Equip. (Previously Customized)
4. Expanded Hard-Surface Games
5. Sandbox w/ Diggers
6. Shade Structure & Outdoor Classroom w/ Boulder Seating
7. Turf Field
8. Gateway Structure
9. Landscape Berms
10. Existing Swings

### Washington Elementary School Active Play Areas Master Plan Description

Washington Elementary Schools design team came up with innovative ways to show school spirit and improve learning. 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 Washington schoolyard in an effort to fulfill the vision and goals developed by the design team:

#### 1. Measured Jogging Path

A jogging path has been added around the turf field and main play equipment areas to promote activity. The path, made of stabilized crusher fines, will be used for running and PE classes. The path is measured (1/8 mile) to allow students and community members to easily calculate their overall distance with relative accuracy.

#### 2. Adjustable Basketball Hoops

Incorporating adjustable basketball standards will provide students of all ages with the opportunity to participate in recreational activities before, during, and after school.

#### 3. Age-Appropriate Play Equipment

The existing play equipment at Washington is mostly old and out-dated. This equipment is not appropriately suited to meet the needs of different age groups or students with special needs. The new play structure, previously selected by the school, was chosen to meet the needs of the appropriate age group. The new equipment will not only be safer than the existing structure(s), but challenge the students by testing their coordination, balance, and strength in a colorful and alluring setting.

#### 4. Expanded Hard-Surface Games

The expanded hard surface area(s) will include colorful ball courts, games, and educational elements which enlarge the playground on the North and East side of the school. This allows the recess monitors to focus their attention on a smaller portion of the outdoor play area. The expanded play surface will allow for a more even distribution of play activities, and therefore students, throughout the grounds. The hard-surface area includes three basketball courts with adjustable hoops, two tetherball zones, two funnel ball zones, and several areas for four-square and hop-scotch.

#### 5. Sandbox with Diggers

The sandbox will be enlarged and perimeter reinforced to help contain the sand; the existing diggers will be moved into the pit to allow for a larger number of participants.

#### 6. Shade Structure and Outdoor Classroom

The current Washington play area(s) lack 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. The addition of new trees will increase shade areas and places for students and the community to congregate and cool down on warm, sunny days as well as break up the existing playground with vertical elements while adding visual interest and seasonal color change.

An outdoor classroom space was highly desired by the teaching staff at Washington. The design team opted to centrally locate the outdoor classroom in the turf area to allow for quiet instruction separate from the active play areas located directly behind the school building. The new classroom will also provide a gathering area with shade trees for community meetings or after school activities.

#### 7. Turf Field

The large area of pea gravel north of the school is currently underutilized. Re-grading and adding mixed-seed turf will allow for the incorporation of gathering spaces and practice fields. Using a blue-grass/fescue mix will reduce the need for irrigation while maintaining a soft field for sports. This will allow Washington the opportunity to utilize the space during gym class while also providing an area for community members to recreate.

#### 8. Gateway Structure

Community gateways act as an entrance to the school grounds and a landmark to promote a sense of pride and identity for the students, faculty, and staff. The gateway at Washington will be located at the southwest side of the building near the main building and playground entrance. This gateway will be utilized by students and community members alike before, during, and after school.

#### 9. Landscape Berms

Incorporating landscape berms throughout the turf area will create visual interest and help break up the large flat playground, create places for students to play, help delineate spaces, and help with overall noise reduction.

#### 10. Existing Swings

The existing swings will be incorporated into the design and improved with refinishing and the addition of EWF (engineered wood fiber) pits for safety.



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Section Four

4



- Cost Estimate
- Resources
- Acknowledgements

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**Washington Elementary - Active Play Areas Master Plan**

*Estimate of Probable Landscape Costs*

This estimate includes the renovation of the primary play structure area, expanded concrete hard surface games, a primary gateway feature, shade structure/outdoor classroom, stabilized track surface and grading and re-sodding fields

| Category  | Unit | Unit Cost   | Quantities | Total Cost           |
|---|------|-------------|------------|----------------------|
| <b>Play Equipment , Structures &amp; Surfacing</b>  |      |             |            |                      |
| <b>Play Equipment</b>                               |      |             |            |                      |
| Climbing Structures                                 | LS   | \$5,000.00  | 1 \$       | 5,000.00             |
| Primary Play Equipment                              | LS   | \$80,000.00 | 1 \$       | 80,000.00            |
| Primary Play Equipment installed                    | LS   | \$30,000.00 | 1 \$       | 30,000.00            |
| Swings (3 bay 6 seat)<br>(Pending final costs)      | LS   | \$4,000.00  | 1 \$       | 4,000.00             |
| <b>SUBTOTAL</b>                                     |      |             |            | <b>\$ 119,000.00</b> |
| <b>Play Surfacing (12" EWF Delivered/Installed)</b> |      |             |            |                      |
| Primary Play Area (W/Swing Pit)                     | SF   | \$2.50      | 15,317 \$  | 38,292.50            |
| Intermediate Play Area                              | SF   | \$2.50      | 0 \$       | -                    |
| <b>SUBTOTAL</b>                                     |      |             |            | <b>\$ 38,292.50</b>  |
| <b>Concrete &amp; ADA Accessibility</b>             |      |             |            |                      |
| Concrete Seat-Wall                                  | LF   | \$29.00     | 101 \$     | 2,929.00             |
| Concrete Flatwork- 6" depth                         | SF   | \$4.00      | 1,790 \$   | 7,160.00             |
| Concrete mow band, 8"x6"                            | LF   | \$11.00     | 0 \$       | -                    |
| Concrete Curbwall @ play pits                       | LF   | \$20.00     | 344 \$     | 6,880.00             |
| Concrete Ramp at Play Pits                          | EA   | \$800.00    | 2 \$       | 1,600.00             |
| Concrete Stairs                                     | LF   | \$37.00     | 0 \$       | -                    |
| <b>SUBTOTAL</b>                                     |      |             |            | <b>\$ 18,569.00</b>  |
| <b>Site Work</b>                                    |      |             |            |                      |
| <b>Grading &amp; Asphalt Striping</b>               |      |             |            |                      |
| Earthwork and Drainage                              | LS   | \$25,000.00 | 1 \$       | 25,000.00            |
| New Asphalt, 4" depth                               | SF   | \$1.80      | 0 \$       | -                    |
| Reconditioned seal existing                         | SF   | \$0.95      | 0 \$       | -                    |
| Map Striping  | EA   | \$1,500.00  | 1 \$       | 1,500.00             |
| Tetherball Striping                                 | EA   | \$150.00    | 4 \$       | 600.00               |
| Hopscotch Striping                                  | EA   | \$400.00    | 4 \$       | 1,600.00             |
| Basketball Court Striping                           | EA   | \$400.00    | 3 \$       | 1,200.00             |
| 4-Square Striping                                   | EA   | \$250.00    | 5 \$       | 1,250.00             |
| Hawk Footprints                                     | LS   | \$1,000.00  | 0 \$       | -                    |
| Painted Line-Up Lines                               | LS   | \$200.00    | 3 \$       | 600.00               |
| Wall-ball Court Striping                            | EA   | \$250.00    | 0 \$       | -                    |
| <b>SUBTOTAL</b>                                     |      |             |            | <b>\$ 31,750.00</b>  |
| <b>School Design Elements</b>                       |      |             |            |                      |
| Outdoor Classroom/ Lunch Area                       | EA   | \$10,000.00 | 0 \$       | -                    |
| Shade Structure                                     | EA   | \$30,000.00 | 1 \$       | 30,000.00            |
| Gateway Feature (Primary)                           | LS   | \$10,000.00 | 1 \$       | 10,000.00            |
| Gateway Feature (Secondary)                         | LS   | \$3,000.00  | 0 \$       | -                    |
| Banner Pole and Banners                             | EA   | \$900.00    | 0 \$       | -                    |
| <b>SUBTOTAL</b>                                     |      |             |            | <b>\$ 40,000.00</b>  |

**Washington Elementary - Active Play Areas Master Plan**

|   |    |             |           |                      |
|---|----|-------------|-----------|----------------------|
| <b>Running Track</b>                                  |    |             |           |                      |
| Crusher Fines, 4' WIDE X 4" depth                     | SF | \$1.00      | 7,896 \$  | 7,896.00             |
| Crusher Fines Stabilizer                              | SF | \$1.20      | 7,896 \$  | 9,475.20             |
| Steel Edging  | LF | \$5.00      | 1,640 \$  | 8,200.00             |
| <b>SUBTOTAL</b>                                       |    |             |           | <b>\$ 25,571.20</b>  |
| <b>Site Furnishings, Athletic Equipment and Misc.</b> |    |             |           |                      |
| Picnic Table @ lunch area                             | EA | \$1,000.00  | 0 \$      | -                    |
| Trash Receptacle                                      | EA | \$650.00    | 2 \$      | 1,300.00             |
| 6' Bench  | EA | \$850.00    | 4 \$      | 3,400.00             |
| Adjustable Basketball Goal                            | EA | \$1,800.00  | 2 \$      | 3,600.00             |
| Tetherball Poles                                      | EA | \$350.00    | 4 \$      | 1,400.00             |
| Permanent or Moveable Soccer Goals                    | EA | \$1,000.00  | 0 \$      | -                    |
| 6' Chain Link Fence @ Intermediate Play Area          | LF | \$25.00     | 0 \$      | -                    |
| <b>SUBTOTAL</b>                                       |    |             |           | <b>\$ 9,700.00</b>   |
| <b>Landscape Planting and Irrigation</b>              |    |             |           |                      |
| Shrub Bed Soil Prep                                   | SF | \$0.30      | 165 \$    | 49.50                |
| Sod and Soil Prep @ field and play areas              | SF | \$0.55      | 31,435 \$ | 17,289.43            |
| Irrigation, shrub beds                                | SF | \$0.75      | 165 \$    | 123.75               |
| Irrigation, sod areas                                 | SF | \$0.55      | 31,435 \$ | 17,289.25            |
| Irrigation, tree bubblers                             | EA | \$60.00     | 10 \$     | 600.00               |
| Shade Tree, 3" caliper                                | EA | \$400.00    | 10 \$     | 4,000.00             |
| Deciduous Ornamental Tree, 2.5" caliper               | EA | \$100.00    | 0 \$      | -                    |
| Boulder-field   | EA | \$150.00    | 6 \$      | 900.00               |
| Shredded Mulch, 4" depth                              | SF | \$1.20      | 0 \$      | -                    |
| <b>SUBTOTAL</b>                                       |    |             |           | <b>\$ 40,251.93</b>  |
| <b>Community Vegetable Garden</b>                     |    |             |           |                      |
| Soil Amendment  | CY | \$35.00     | 0 \$      | -                    |
| Concrete mow band, 8"x6"                              | LF | \$11.00     | 0 \$      | -                    |
| 4' Chainlink Fence                                    | LF | \$20.00     | 0 \$      | -                    |
| Chain Link Gate, 4' width                             | EA | \$350.00    | 0 \$      | -                    |
| Irrigation  | EA | \$1,500.00  | 0 \$      | -                    |
| Compost Storage & Accessories                         | EA | \$1,000.00  | 0 \$      | -                    |
| <b>SUBTOTAL</b>                                       |    |             |           | <b>\$ -</b>          |
| <b>Site Improvements Total</b>                        |    |             |           | <b>\$ 323,134.63</b> |
| <b>Project Start Up</b>                               |    |             |           |                      |
| Typical construction mobilization                     |    | \$10,000.00 |           | \$10,000             |
| <b>Infrastructure</b>                                 |    |             |           |                      |
| Typical infrastructure construction/repair            |    | \$10,000.00 |           | \$10,000             |
| <b>Demolition</b>                                     |    |             |           |                      |
| Typical Demolition                                    |    | \$25,000.00 |           | \$25,000             |
| <b>Architecture Engineering and Coordination</b>      |    |             |           |                      |
| 8% of construction cost                               |    | \$25,850.77 |           | \$25,850.77          |
| <b>Owner Representative Fees</b>                      |    |             |           |                      |
| 5% of construction cost                               |    | \$16,156.73 |           | \$16,156.73          |
| <b>Contingency Cost</b>                               |    |             |           |                      |
| 10% of construction cost                              |    | \$32,313.46 |           | \$32,313.46          |
| <b>Project Grand Total</b>                            |    |             |           | <b>\$ 442,455.60</b> |
| <b>Additional Features</b>                            |    |             |           |                      |
| Poured in Place (Primary Play Area)                   | SF | \$25.00     | 15,317    | \$382,925            |
| Poured in Place (Intermediate Play Area)              | SF | \$25.00     | 0 \$      | -                    |
| <b>Project Grand Total W/ Additon(s)</b>              |    |             |           | <b>\$ 787,088.10</b> |

**Resources**

National Center for Health Statistics,  
 National Survey of Children's Health, 2003–2007,  
 Centers for Disease Control and Prevention.  
 Health at a Crossroads  
 2010 Supplement to the Colorado Health Report Card –  
 Colorado Health Foundation  
 Lamar RE-2 School District website (<http://www.lamar.k12.co.us/>)  
 Washington Elementary School website (<http://wes.lamar.k12.co.us/home>)

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