**SITE ANALYSIS AND DESIGN DEVELOPMENT**

**Vision:**
- "Improve the student’s quality of life by providing them with a solid academic foundation that will enable them to compete in a literate, technological, multicultural, and social emotional global arena."

**Goal:**
- "To create a mentally and physically developmental play experience and to provide a comfortable community gathering place; both of which will improve the quality of living for the Barnum community neighborhood."

---

**MATERIALS:**

- **Hard Surface Play/Asphalt:** 14,756 SQFT (24.5%)
- **Pea Gravel:** 35,244 SQFT (58.5%)
- **Parking Lot/Asphalt:** 10,273 SQFT (17%)
- **TOTAL:** 60,273 SQFT

---

**ECE Play Area:**

- **Pea Gravel:** 2,035 SQFT (61.6%)
- **Sand:** 1,266 SQFT (38.4%)
- **TOTAL:** 3,301 SQFT

---

**ELEMENTARY SCHOOL COMMENTS**
- Pea gravel is close to the asphalt
- The track needs connection throughout the design
- The site has drainage issues
- No shade within the school design
- Need grass for children to play on

**GRADUATE STUDENT COMMENTS**
- The design has no central organizing element
- The slope of the asphalt is too small
- The bio swale is located too close to the building
- The circus theme elements need to be elaborated on in both plan and section
- Need more dynamic/multi-purpose educational components
- Multi-use field is small
- The internal circulation needs to be addressed
- The ECE is located on a busy street, distant from the main play area

---

**2005 DESIGN DEVELOPMENT**

**EXISTING CONDITIONS:**
- Pea gravel is close to the asphalt
- The track needs connection throughout the design
- The site has drainage issues
- No shade within the school design
- Need grass for children to play on

---

**LOCATION:**
85 Hooker Street, Denver, CO

---

**drawn by:**
CHRISTINE CLARK

**date:** DECEMBER 2, 2009

---

**Schematic Design Diagrams**

- A. Performer’s Act
- B. Circus Art
- C. Circus Music
- D. Animal Act
- E. Animal Education
- F. Animal Habitat

---

**University of Colorado at Denver**

---

**Barnum Elementary School Learning Landscape Playground Design Development**

---

**Barnum Elementary**

---

**Learning Landscape Playground Design Development**

---

**85 Hooker Street, Denver, Colorado 80219**

---

**Pamela Cornelisse**

---

**Spring 2005**

---
PT Barnum was a famous resident entertainer. The design theme for Barnum Elementary School will reflect the ideas and design ideals of a circus. The aesthetic ordering system is based on a three-ring circus. The circus can be defined as an "arena enclosed by tiers of seats and used for the spectacles" or an activity of "showy public display." A three-ring circus hosts performances simultaneously in three separate rings.

- The World Map Mural will have animal images to accompany the 7 continents.
- The entrance art will have animal images.
- The community art as musical instruments will accompany the animal acts.
- The Colorado Animal Footprints will originate at the lunch room playground.
- The footprints morph from large to small mammal footprints. The name of the mammal accompanies the footprint.

The design theme components:
- Theme Components: Playground as a sound system
- Shade structure: Center stage musical instrument
- Learning in the landscape:
  - Theme components
  - Pattern
  - Form
  - Color
  - Color wheel
  - World map mural
  - Entrance art
  - Center stage musical instrument
  - Community art as musical instruments
  - Animal footprints - paths originate at the lunch room playground exit.
  - The footprints morph from large to small mammal footprints. The name of the mammal accompanies the footprint.
  - P.T. Barnum was a famous resident entertainer.
LIST OF PROGRAM ELEMENTS:
1. ECE PLAY STRUCTURE
2. ECE SWINGS (1 BAY)
3. ECE ANIMAL SAND PLAY
4. ECE CLIMBING PLAY
5. PRIMARY PLAY
6. INTERMEDIATE PLAY
7. SWINGS (1 BAY)
8. SAND PLAY
9. CLIMBING PLAY
10. BASKETBALL COURT
11. ASPHALT PLAY
12. SHADE STRUCTURE
13. ENTRANCE
14. OUTDOOR CLASSROOM
15. MULTIPURPOSE SOD FIELD
16. BIO TRIPLE
17. BUTTERFLY GARDEN

MIDTERM REVIEW COMMENTS:
- Truck access to all play pits and fields, 10' gates and paths
- Sand play can possibly be removed from main play area
- Sand play areas must be covered
- Field is small consider a synthetic turf alternative to sod
- ECE formula should allow for 32 students (only 16 currently at school)
- ECE needs more than 2 swings
- Elaborate more on the learning components within the circus and metamorphosis themes
- Allow for fire truck access

FINAL COMPARISON OF THE SCHEMATIC DESIGNS:

GRADUATE STUDENT WORK OPPORTUNITIES:
- Strong entrance gesture
- Larger field area
- Play equipment together
- Swings back to edge of site
- ECE swings located on edge of site
- Adequate shade from trees

GRADUATE STUDENT DESIGN THEME PRIORITY LIST:
- Zebra print transition between concrete, sand blasted concrete and asphalt
- Shade structure becomes a musical instrument including musical tables, corrugated wall, drums, etc.
- ECE circus themed seating with numbers on the tops of the seats
- Brass animal footprints of Colorado along the main school playground axis
- Community art becomes whimsical, kinetic pieces that play off the wind and other sound making sources

LANDSCAPE ARCHITECT WORK OPPORTUNITIES:
- Strong gesture from school
- Resolved the central circle play area

CONSTRAINTS:
- Field size has been reduced
- Less strong gesture from entrances
- Swings are located in the center of site, and there are only two swings
- Reduction in shade trees

DRAWN BY: CHRISTINE CLARK
DATE: DECEMBER 2, 2009
ECE PLAY AREA

CIRCUS THEMED SEATING

PLAN:
Colored concrete seats with a colored rubber floor surface

SCALE: 1/8"=1'-0"

SOUND GARDEN

CONCRETE/ ASPHALT CONTRAST

CONCRETE/ SAND BLASTED CONCRETE CONTRAST

BUTTERFLY GARDEN:
METAMORPHOSIS

KOREAN SPICE VIBURNUM: LARVAL HOST

BUTTERFLY BUSH COMPACT: NECTAR SOURCE

BLUE OAT GRASS: EGGS

ENTRANCE ZEBRA GROUND PATTERN

CONCRETE PATH

MAINTENANCE GATE

SWINGS

ELEVATION:

SWING PLAY SURFACE

BANNER POLES

ELEVATION:

SOD

NATURAL HABITAT

6' X 6' SAND BOX

CIRCUS THEMED SEATING AREA