

THE PINE RIDGE PROJECT REVITALIZING THE FORGOTTEN

quinn sackreiter-heesch
la 572 | design development



IMAGE COURTESY OF AARON HUEY

WHY IS PINE RIDGE IMPORTANT?

The project site is in an area in America that is in extreme need. Not many are aware of the 3rd world country status of the Pine Ridge Indian Reservation, and I feel that it's an important place to implement a project that will serve the needs of the people living there.

PROBLEM STATEMENT

The lack of public spaces and urban planning in the Pine Ridge Indian Reservation communities is affecting the resident's health, safety, and ability for economic advancement and community involvement.

WHERE?

south west south dakota

3,468.86 square miles / 2,000,000 acres

population: 28,700 persons

elevation: 2820 feet

topography: rolling mixed grass prairie and badlands (sandhills)

climate: 88° F (avg. high) 6.9° F (avg. low)

annual precipitation: 16.64 inches

counties in sd/ne: shannon, jackson, bennett & sheridan

1 of 9 sd reservations (standing rock, cheyenne river, lake traverse, flandreau, yankton, rosebud, crow creek, and lower brule)

8th largest Indian reservation in the United States

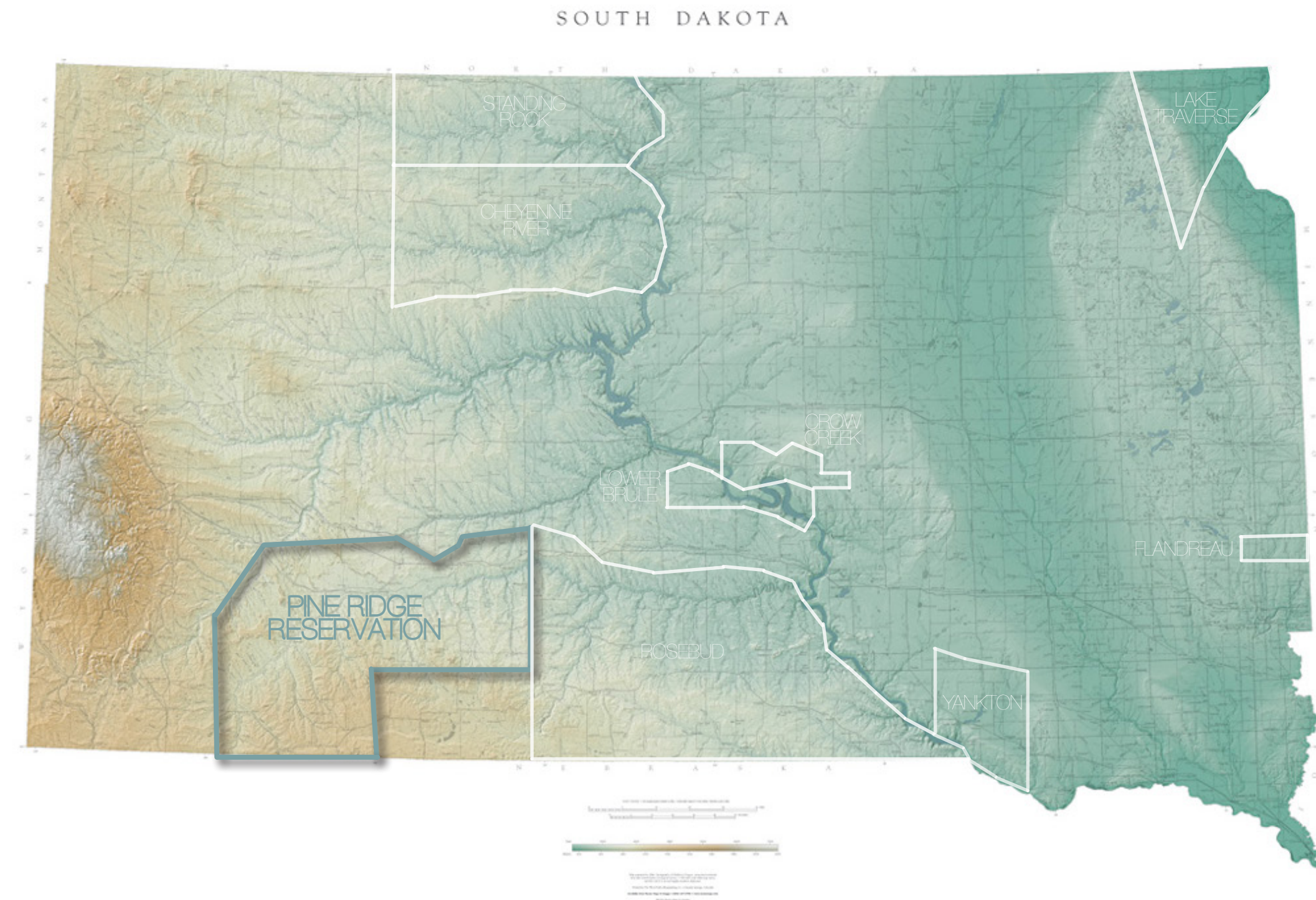
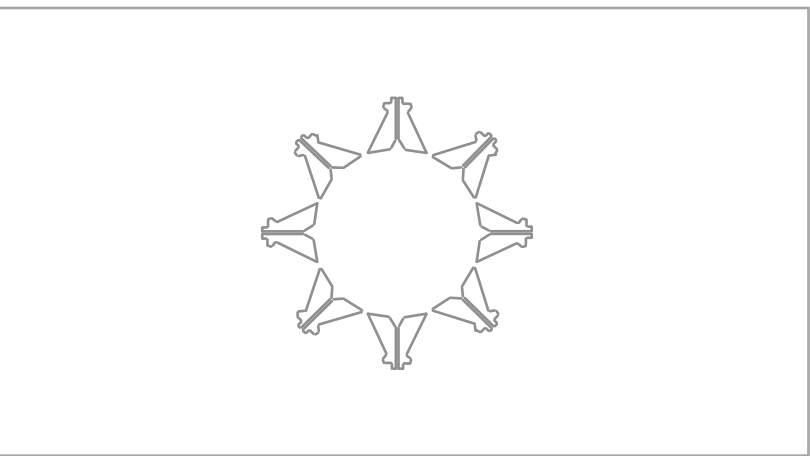




IMAGE COURTESY OF AARON HUEY



OGLALA LAKOTA SIOUX HISTORY

one of 7 subtribes of the Lakota, along with the Nakota & Dakota to make up the Great Sioux Nation
OGLALA 'to scatter one's own'

- 1830**
3,000 members in the OGLALA Sioux tribe
- 1820-1830**
Band together with 3 other Sioux tribes to form the Sioux Alliance
- 1868**
Fort Laramie Treaty guarantees ownership of the Black Hills to the Lakota Sioux people
- 1872**
Gold is discovered in the Black Hills
- 1876**
The Battle of the Little Big Horn
- 1877**
The Great Sioux War ends
- 1889**
Pine Ridge Indian Reservation Established
- 1890**
Wounded Knee Massacre
- 1974**
Attempted to become their own nation
- 1980**
Awarded \$1.22 billion settlement in compensation for the Black Hills, wouldn't accept the money
- 2007**
Attempted to withdraw from all treaties with the United States Government (ppx: 30)

PINE RIDGE INDIAN RESERVATION

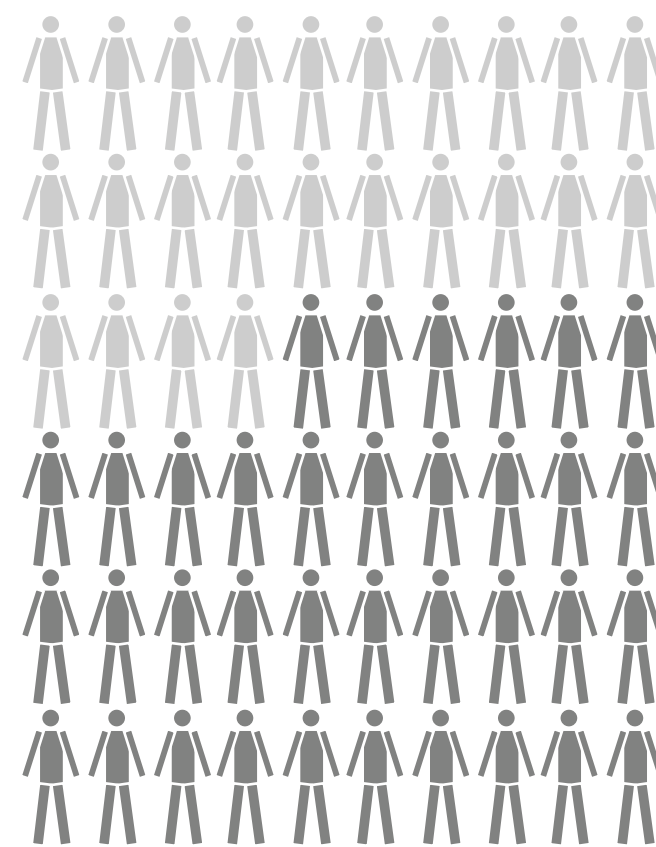
key places: oglala (project site)
pine ridge
wounded knee site





IMAGE COURTESY OF AARON HUEY

PINE RIDGE RESERVATION STATISTICS



56% of Oglala's population are children (under 18)



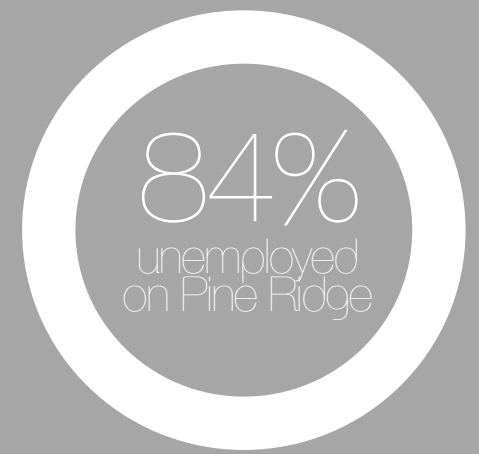
infant mortality rate 300% higher than U.S.



\$3,000 Pine Ridge avg. income



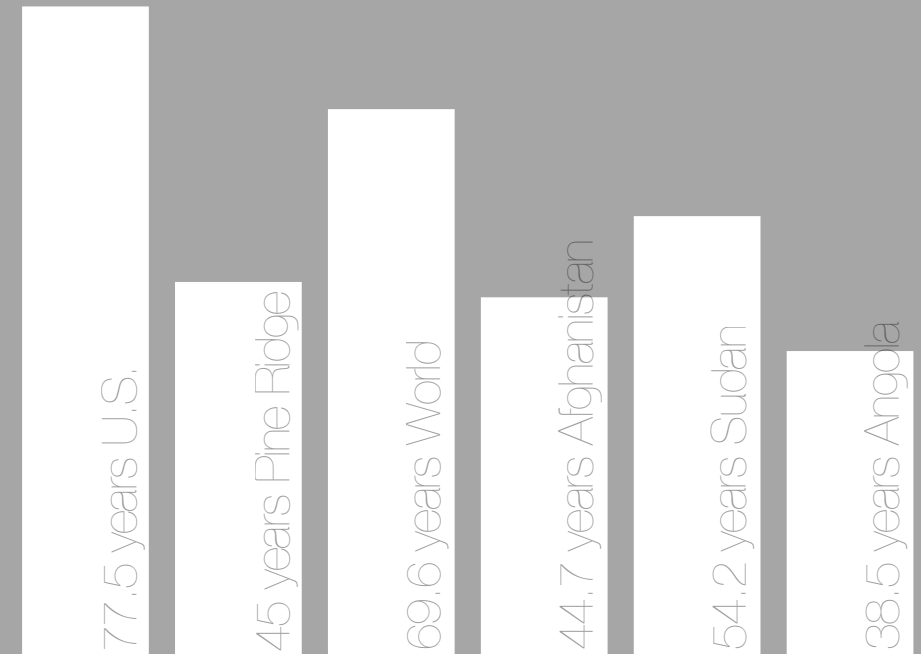
97% below Federal poverty level



84% unemployed on Pine Ridge



7.8% unemployed in U.S.



life expectancy is only higher than Afghanistan, Angola, & Mozambique

OGLALA SOUTH DAKOTA

shannon county - census designated place

population: 1,229 persons
(229 households, 201 families)

size: 13.4 square miles

elevation: 2,995 feet

amenities: recreation center
makeshift soccer field
post office





mobile homes



lack sewer and water



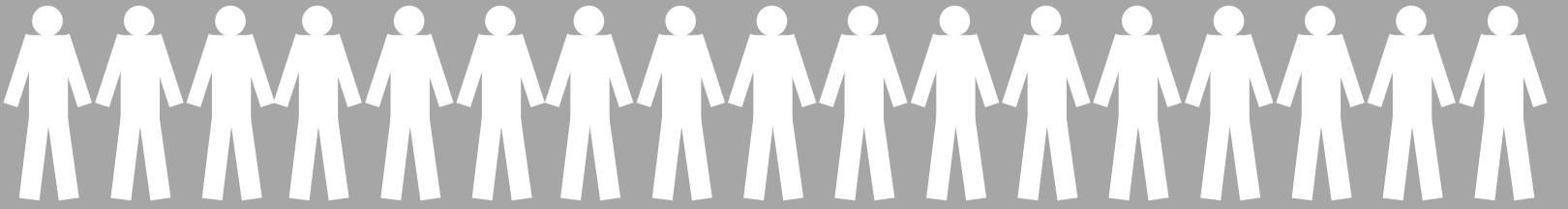
black mold



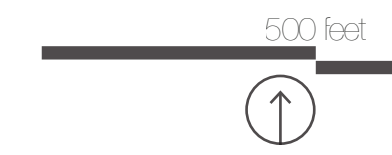
no electricity

HOUSING

current homes built between 1970-1979
in need of 4,000 new homes to combat the homeless situation



PEDESTRIAN CIRCULATION



CONCEPTUAL DESIGN



IMAGE COURTESY OF AARON HUEY

OPTION 01 MASTERPLANNING

- 1 POW WOW GROUNDS
- 2 CAMPGROUND
- 3 HOUSING 1
- 4 RECREATION CENTER
- 5 CHILDREN'S PLAYGROUND
- 6 SOCCER FIELD
- 7 HOUSING 2
- 8 COMMUNITY GARDENS
- 9 2 BASKETBALL COURTS
- 10 2 BASKETBALL COURTS
- 11 PATHWAY SYSTEM



OPTION 02 MASTERPLANNING

- 1 POW WOW GROUNDS
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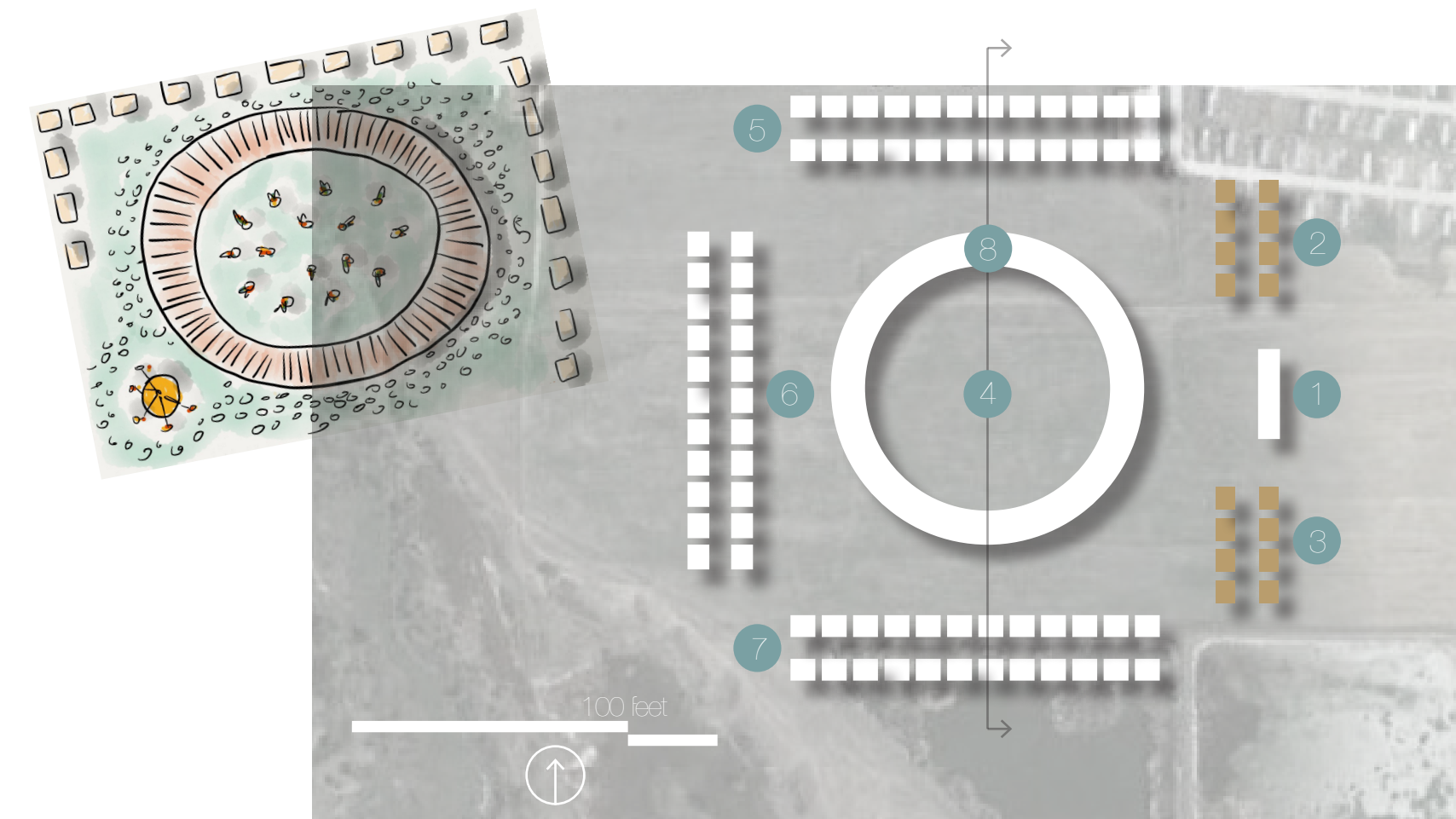
CEREMONIAL + CULTURAL

pow wows, gatherings
powwaw - "spiritual leader"

lasting 1 day to 1 week
dance competition honoring Native American heritage

ELEMENTS OF A POW WOW:





- 1 POW WOW ENTRANCE
- 2 FOOD VENDORS
- 3 FOOD VENDORS
- 4 POW WOW RING
- 5 CRAFT VENDORS (24)
- 6 CRAFT VENDORS (22)
- 7 CRAFT VENDORS (24)
- 8 POW WOW DRUM

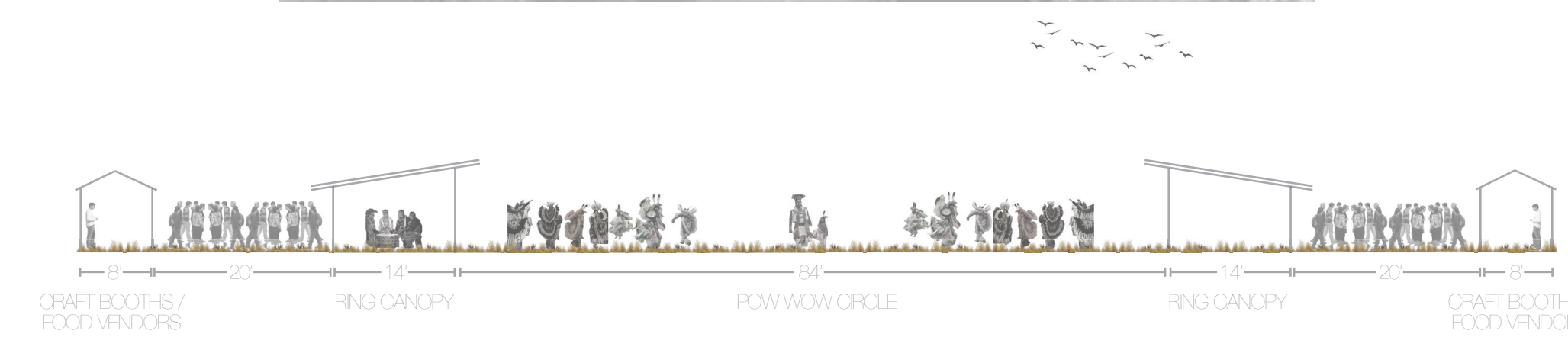


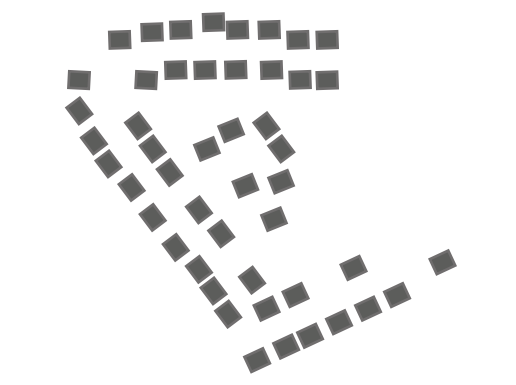
IMAGE COURTESY OF BRENDA PAHMAHME

HOUSING

removing all mobile homes
increasing housing amount by **228%**

1,229
OGLALA
population

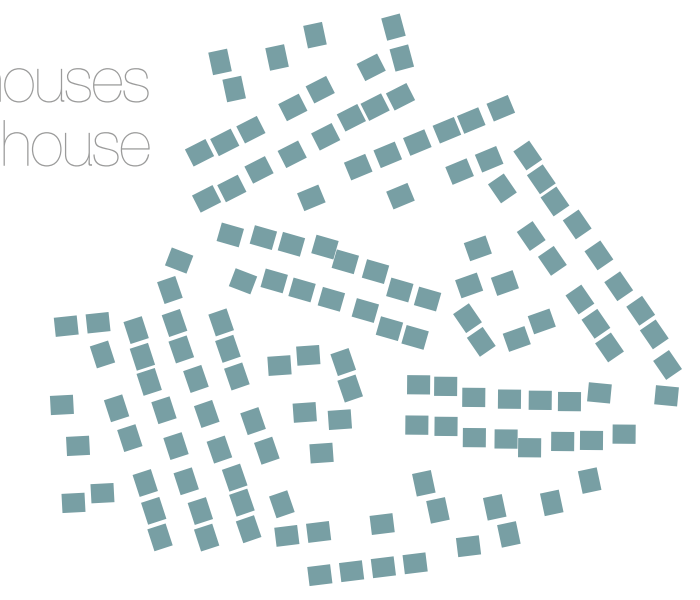
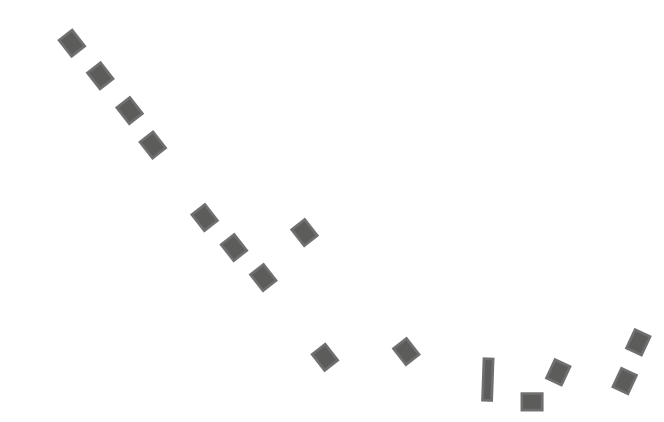
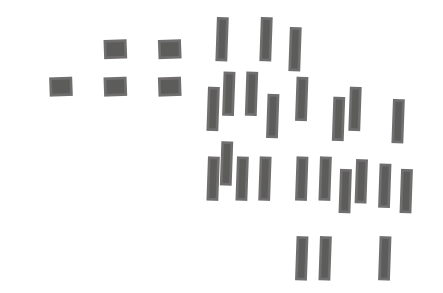
2,878
OGLALA
HOUSING
(acres)



94 current houses
17 people per house



308 projected houses
5 people per house



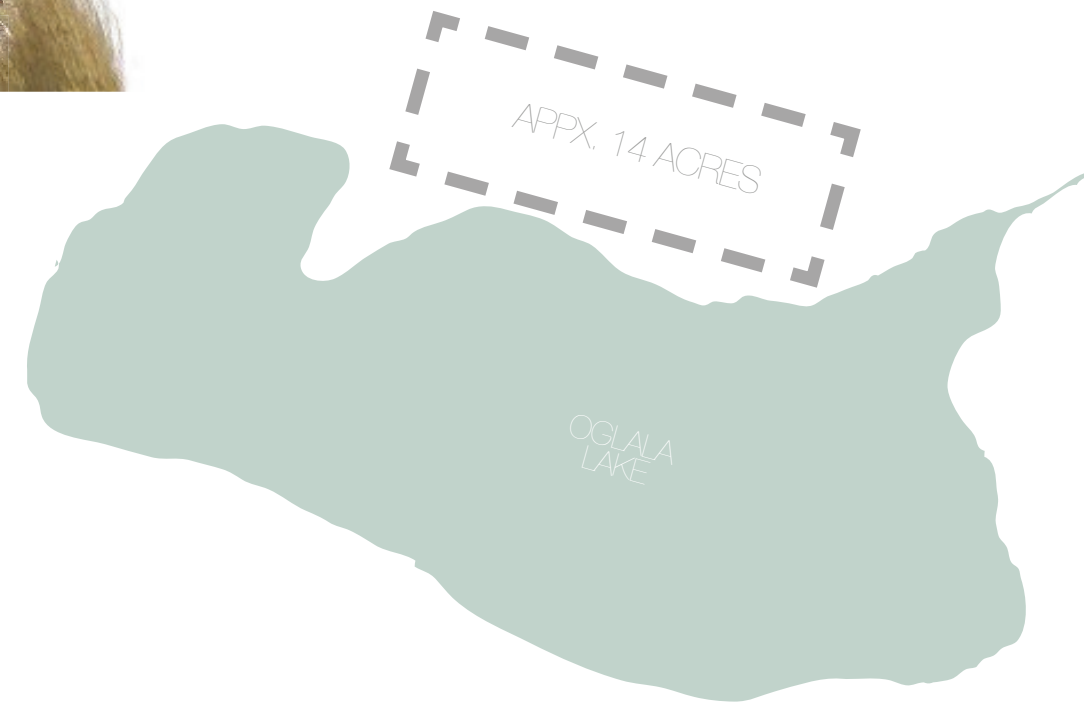


EXAMPLE campsite entrance signage

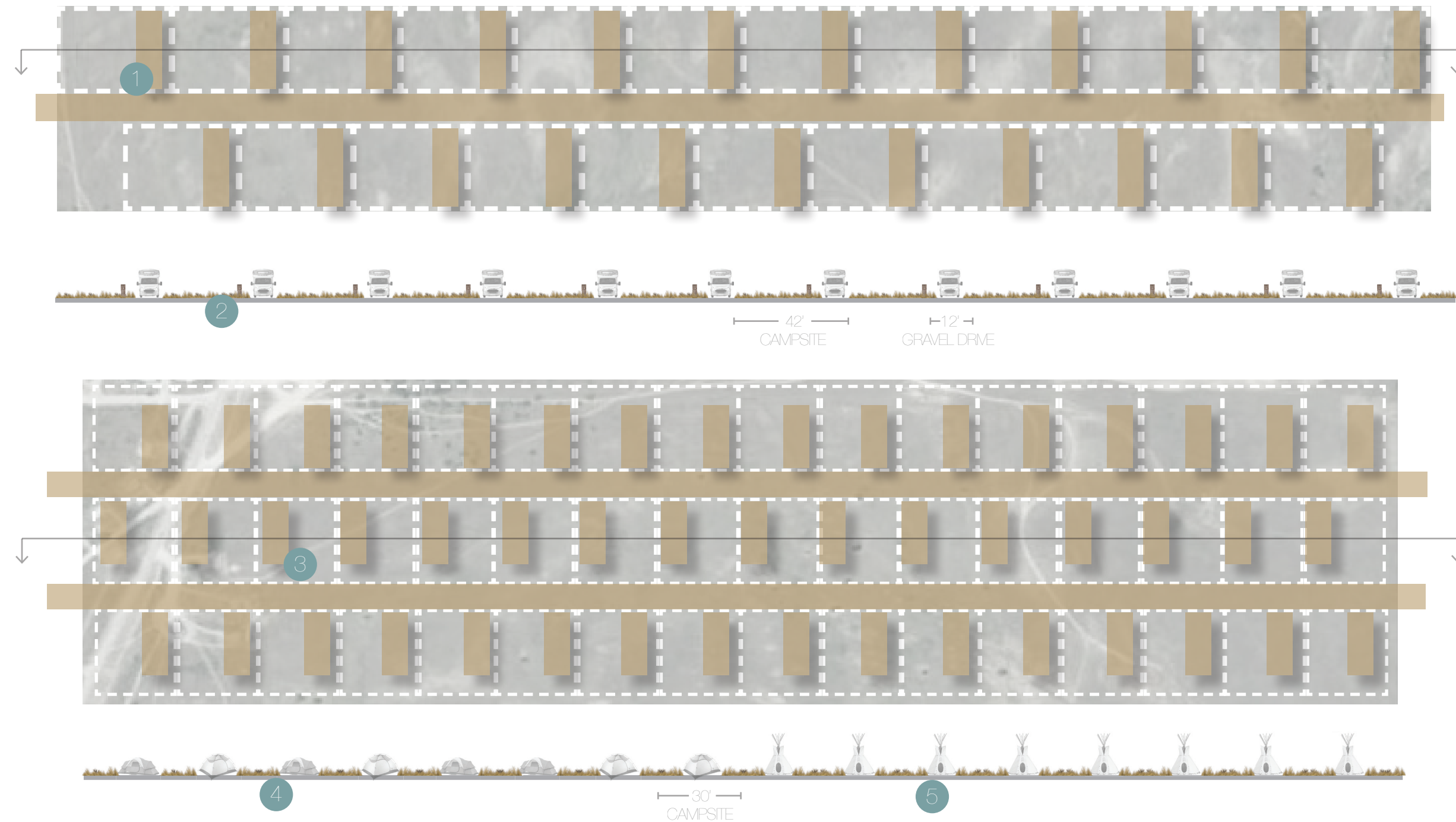


EXAMPLE camping / RV site signage

- 1 12' x 40' gravel RV parking
- 2 campsite signage
- 3 12' x 20' gravel car parking
- 4 tenting sites
- 5 tee pee rental sites



CAMPGROUND LOCATED NORTH OF OGLALA LAKE



POW WOW CAMPGROUND

RV CAMPING / 6 acres

25 sites/acre

each site 42'x40' (RV gravel spot 40'x12') = 1,680 sq. ft.

TENT CAMPING / 3 acres

48 sites/acre

each site 30'x30' (car gravel spot 20'x12') = 900 sq. ft.

TEEPEE RENTALS / 1 acre

48 sites/acre

each site 30'x30' (car gravel spot 20'x12') = 900 sq. ft.

RECREATION / BATHROOMS / ADMIN. / 4 acres

PATHWAY SYSTEM

primary transportation methods:
foot
bike
horse
automobile

EXISTING PATHWAYS = APPX. 10,668 FT.



FINAL DESIGN SOLUTION

01. COHOUSING

02. CENTRALIZED COMMUNITY + CEREMONIAL SPACE

03. ACTIVITY SPACE + COMMUNITY PROGRAMMING

The goal of implementing these 3 key elements is to make a place that is personal to the culture and needs of the Lakota tribe, and in return, mental and physical health conditions will improve along with giving Oglala's residents a better sense of community and pride of place.

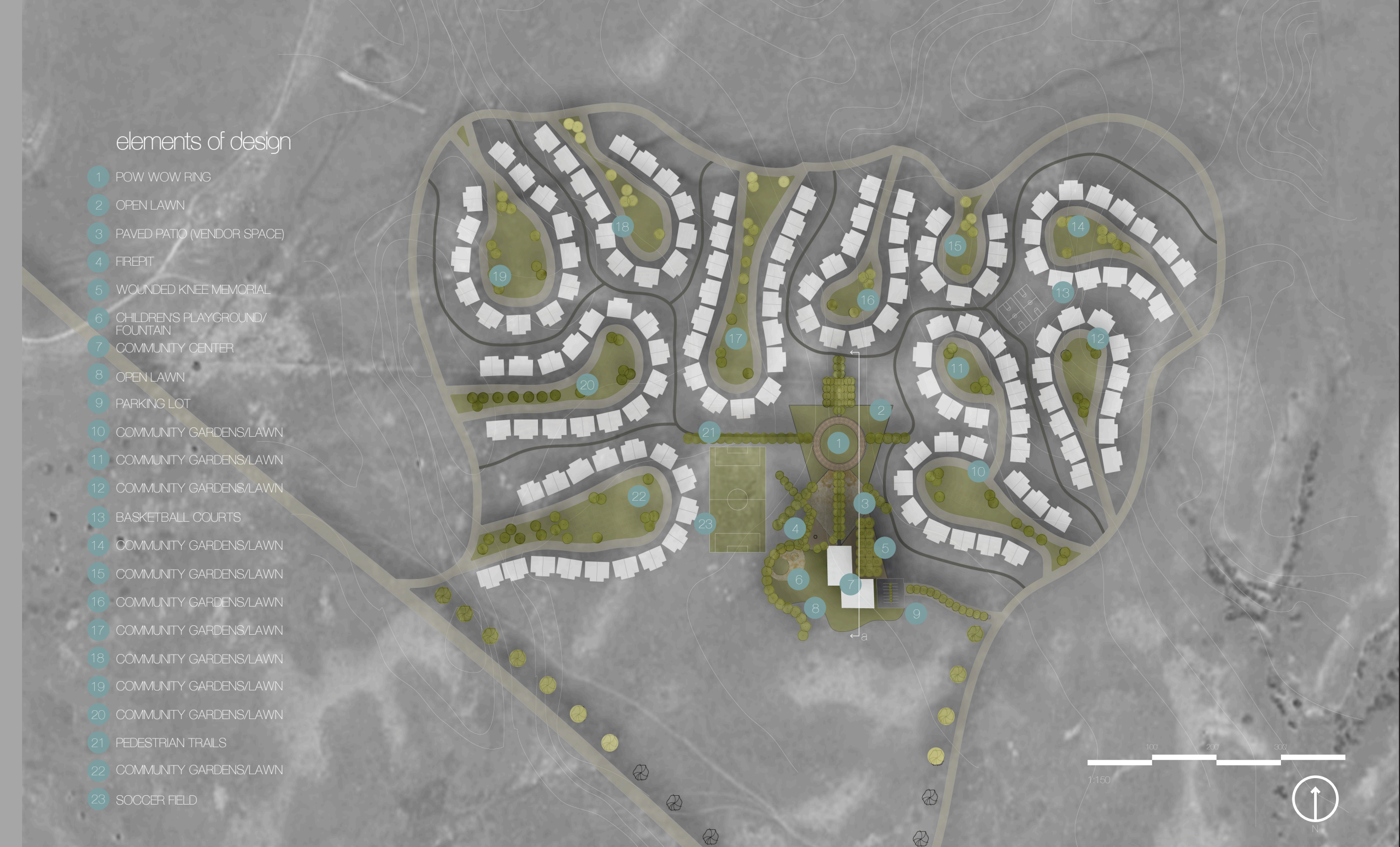


IMAGE COURTESY OF AARON HUEY

OGLALA MASTERPLAN

This design is centered around community and promoting togetherness. The Lakota culture is rich with family ties and helping one another out, that's why it was important to create spaces that allowed people to gather together. The nucleus of this design is the plaza space that's situated in the middle of the residential houses. All paths lead to this space. This area allows for leisurely gatherings and also the biannual Pow Wow that occurs in Oglala. The plaza also has a children's space with playground and fountains. The area is equipped for the hundreds of visitors that come to view the Pow Wow and the vendors that also attend.

Another important part of masterplanning Oglala was creating housing that allowed families to easily interact with one another. Family is extremely important here, and often times homes are multigenerational. By implementing a cohousing system of duplexes situated around neighborhood garden and park space, family members are able to interact with one another with ease and living situations can be improved.



elements of design

- 1 POW WOW RING
- 2 OPEN LAWN
- 3 PAVED PATIO (VENDOR SPACE)
- 4 FREPT
- 5 WOUNDED KNEE MEMORIAL
- 6 CHILDRENS PLAYGROUND/ FOUNTAIN
- 7 COMMUNITY CENTER
- 8 OPEN LAWN
- 9 PARKING LOT
- 10 COMMUNITY GARDENS/LAWN
- 11 COMMUNITY GARDENS/LAWN
- 12 COMMUNITY GARDENS/LAWN
- 13 BASKETBALL COURTS
- 14 COMMUNITY GARDENS/LAWN
- 15 COMMUNITY GARDENS/LAWN
- 16 COMMUNITY GARDENS/LAWN
- 17 COMMUNITY GARDENS/LAWN
- 18 COMMUNITY GARDENS/LAWN
- 19 COMMUNITY GARDENS/LAWN
- 20 COMMUNITY GARDENS/LAWN
- 21 PEDESTRIAN TRAILS
- 22 COMMUNITY GARDENS/LAWN
- 23 SOCCER FIELD

what is COHOUSING?

COHOUSING is collaborative housing in which the residents actively participate in the design and operation of their own neighborhoods. It's created for multigenerational families with lots of open and shared spaces. In Oglala, cohousing was incorporated through the implementation of duplexes. The duplexes are aligned around a neighborhood garden and park space. This space is dedicated to the residents of that particular neighborhood and promotes community and public spaces.





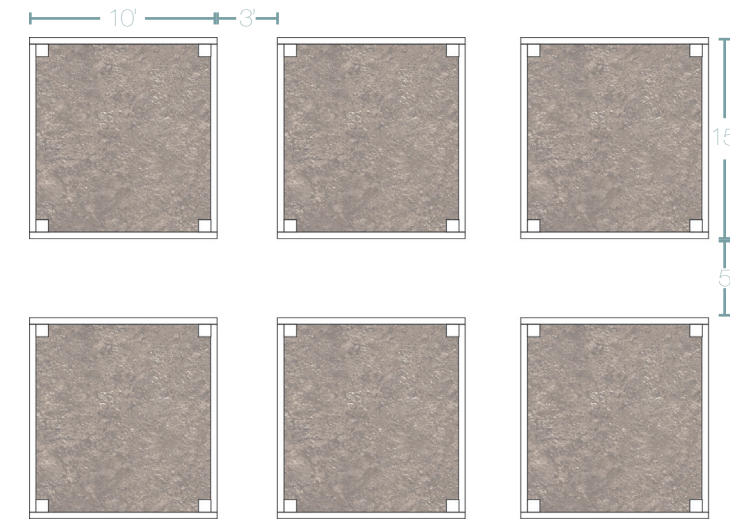
1 residential duplexes

2 neighborhood gardens

3 neighborhood park space

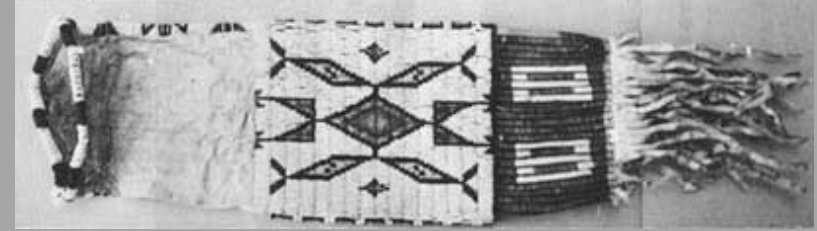
COHOUSING GARDENS + PARK

Each interior green space between the cohousing duplexes provides an intimate place for residents of that neighborhood. The space provides garden plots and 'yard' space.



Planters will be placed in a linear pattern within the greenspace. They're approximately 10x15' with pathways running through at 3 and 5.

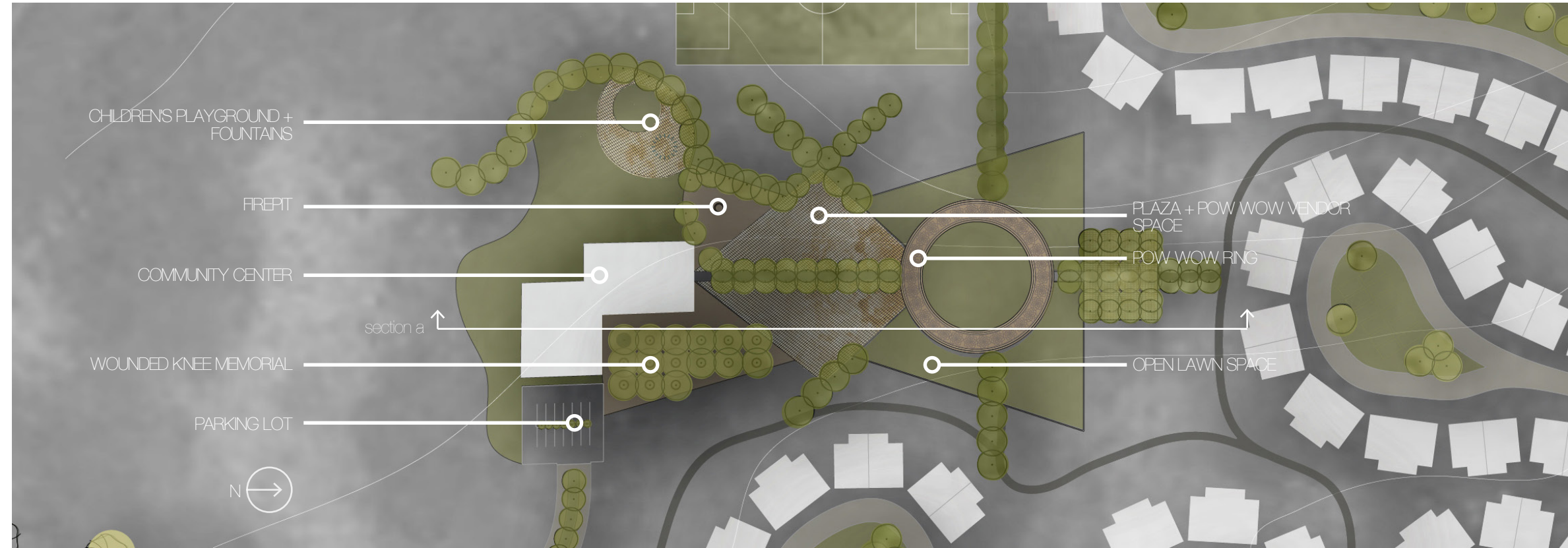




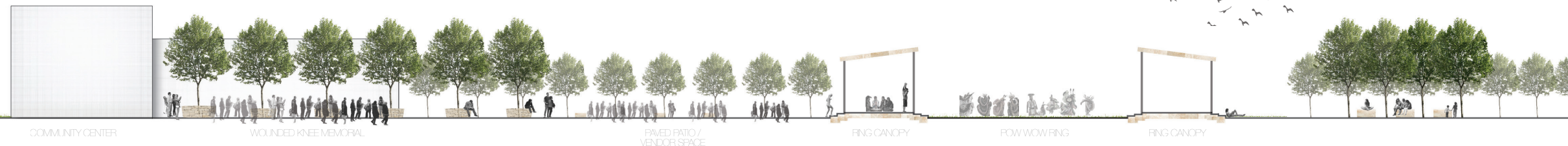
PLAZA DESIGN INSPIRATION
Lakota Sioux beading patterns

PLAZA + CULTURAL SPACE

The plaza space is the nucleus of the design. It provides meeting grounds and amenities for the residents, and also a space for the traditional Pow Wow.

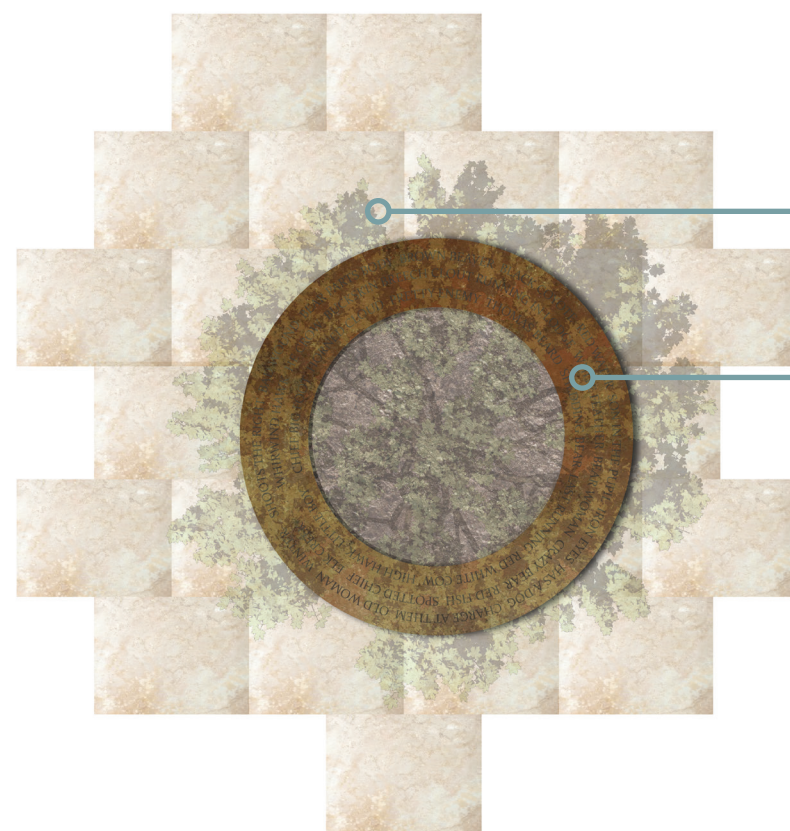


section a



WOUNDED KNEE MEMORIAL

This is an important area to have in Oglala. Many community members were directly affected by the Wounded Knee Massacre. In order to honor and acknowledge them, their names will be engraved in an aluminum ring placed around the plaza trees.



SANDSTONE PAVERS
2x3'

ALUMINUM TREE RING
victim's names etched

AMUR MAPLE
Acer ginnala



ALUMINUM TREE RING
SANDSTONE PLANTER BASE

SANDSTONE PAVERS
PACKED GRAVEL BASE

TREE ROOT SYSTEM



1 POW WOW vendors

2 POW WOW ring

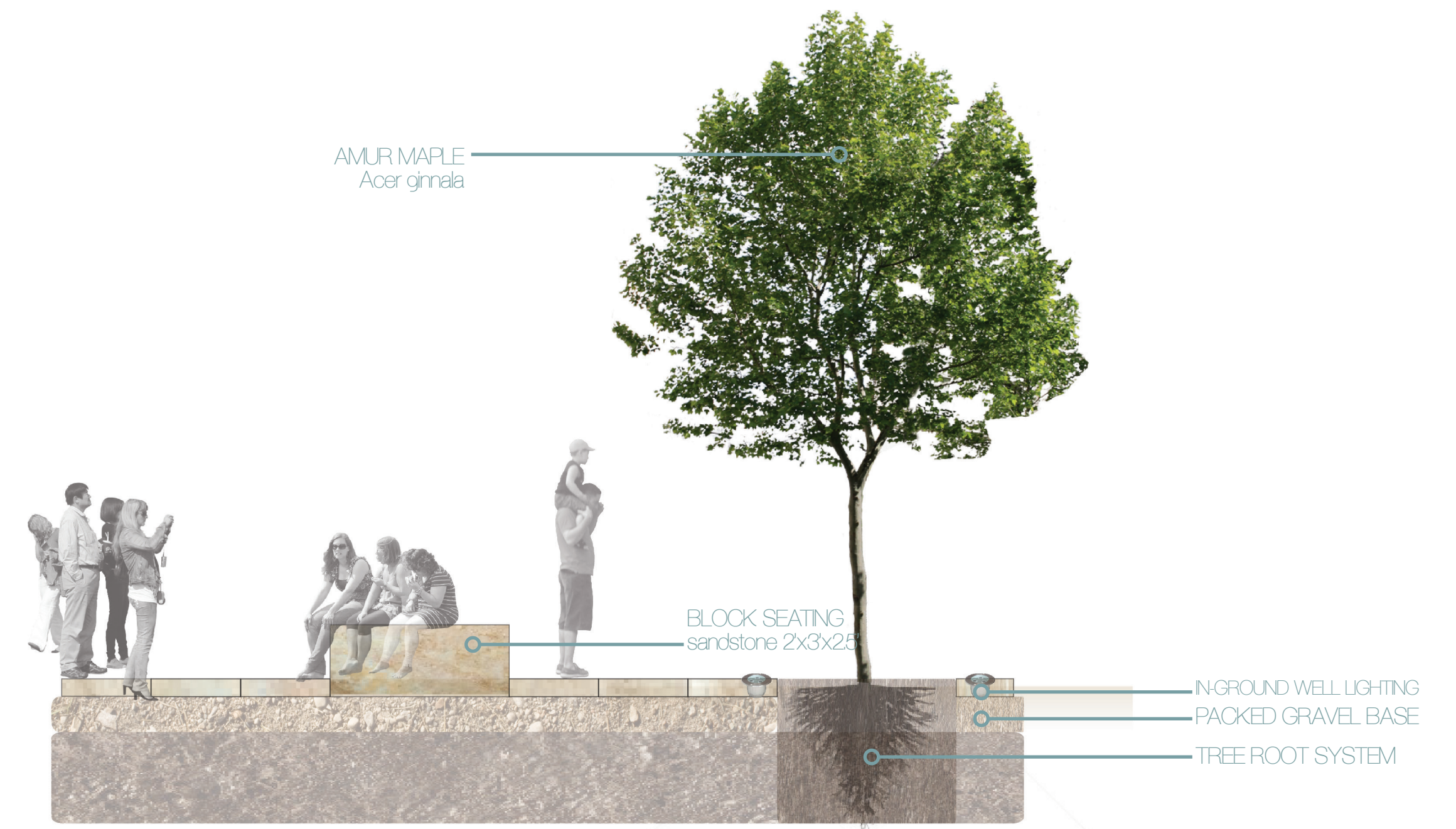
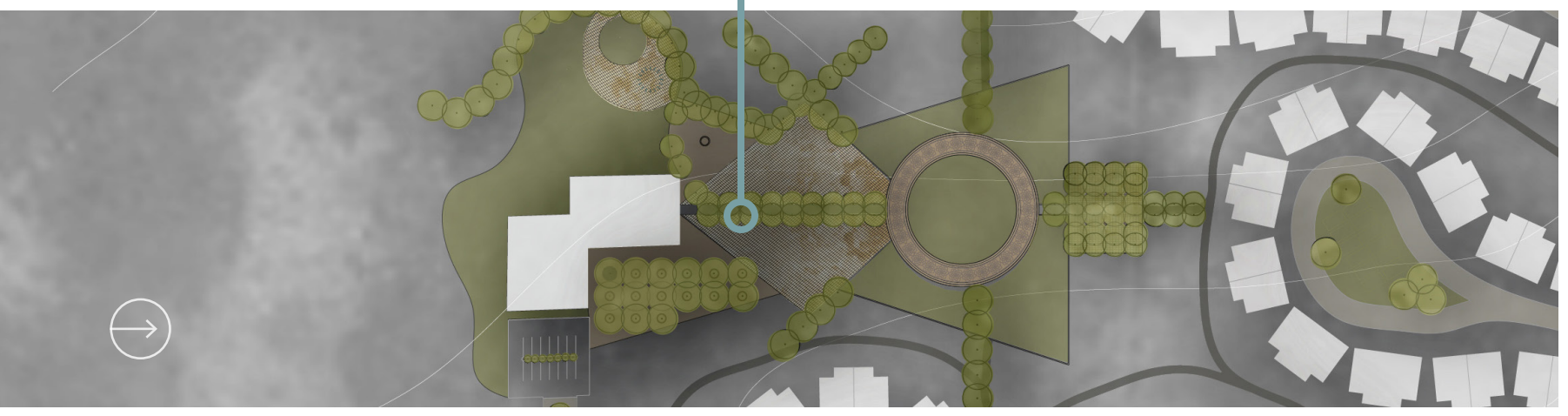
3 walkway to POW WOW

POW WOW PLAZA

The plaza space is an important area for the residents of Oglala. It can be used as a meeting and gathering space for activities and events. It's a space that's available to all residents at all times. During the Pow Wow seasons, the space can be used for vendors to set up their shops, and visitors to relax between the traditional Pow Wow dances.

PLAZA TREES + SEATING

Even though the plaza is a mainly open space to accommodate vendors during the Pow Wows, subtle seating and tree plantings are placed throughout.

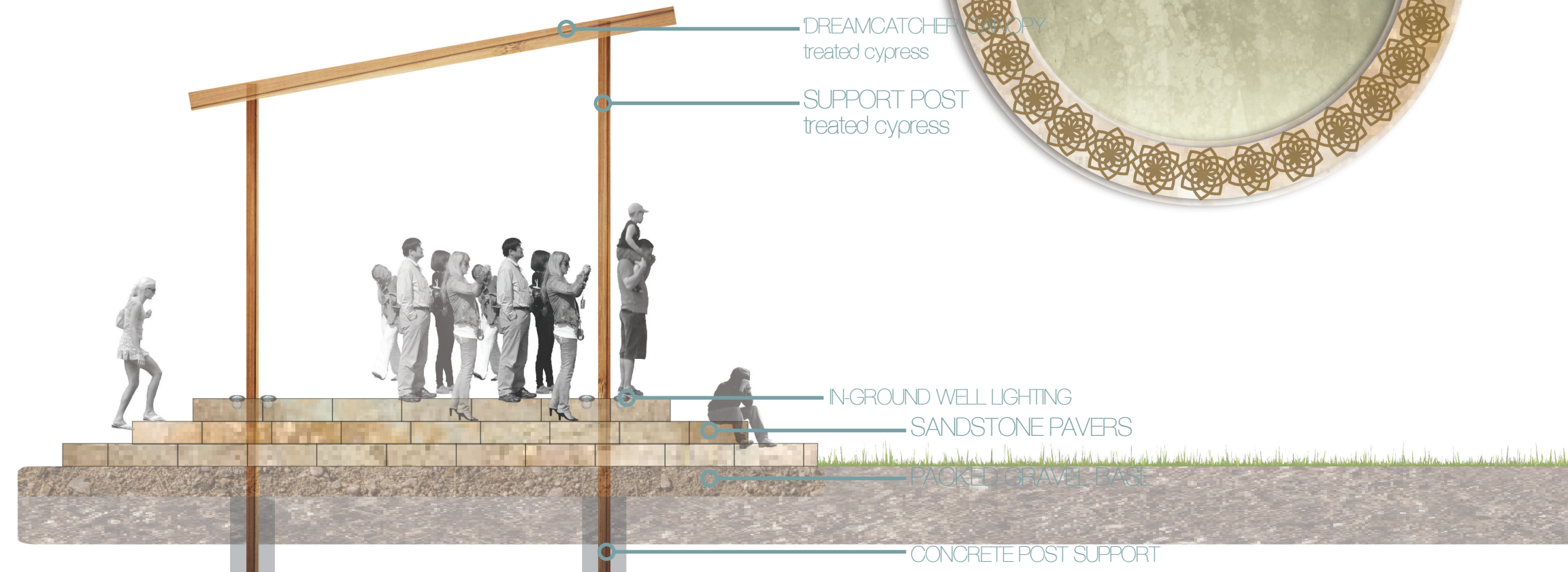


POW WOW RING

The Pow Wow ring is one of the most important cultural elements of this space. It's the nucleus of the community. In this area, residents can gather on the green grass in the center of the ring, lounge on the steps encircling it, and most importantly, host their biannual Pow Wow festivities.



The canopy of the Pow Wow ring was inspired by the pattern created on a traditional dreamcatcher. This element honors the Lakota culture and will create a unique lighting pattern.



CHILDREN'S PLAYGROUND + FOUNTAINS

Because over half of the population in Oglala is children, it was important to incorporate an area for them to play. Along with the 2 basketball courts and soccer field, an area was created with a playground system and interactive fountains.



PLAYGROUND

SANDSTONE PAVERS

IN-GROUND WELL
LIGHTING

INTERACTIVE FOUNTAINS



ACTIVITY SPACES + COMMUNITY PROGRAMMING

Now that a space is provided, activities can begin to start happening that will further community cohesiveness.

PRIMARY ACTIVITY SPACES:

- children's playground
- interactive fountains
- soccer field
- 4 outdoor basketball courts
- neighborhood gardens

COMMUNITY CENTER AMENITIES:

- indoor gathering spaces
- indoor basketball court
- large community kitchen

<p>JANUARY</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS</p> <p>SCHOOL / WINTER</p>	<p>FEBRUARY</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS</p>	<p>MARCH</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS</p>	<p>APRIL</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS SPRING GARDEN PLANTING</p>
<p>MAY</p> <p>SPRING GARDEN PLANTING BASKETBALL LEAGUES SOCCER LEAGUES CHILDRENS ACTIVITIES @ REC CENTER CAMPING LAKE ACTIVITIES</p> <p>SUMMER</p>	<p>JUNE</p> <p>GARDENING BASKETBALL LEAGUES SOCCER LEAGUES CHILDRENS ACTIVITIES @ REC CENTER CAMPING LAKE ACTIVITIES</p>	<p>JULY</p> <p>GARDENING BASKETBALL LEAGUES SOCCER LEAGUES CHILDRENS ACTIVITIES @ REC CENTER CAMPING LAKE ACTIVITIES</p>	<p>AUGUST</p> <p>GARDENING BASKETBALL LEAGUES SOCCER LEAGUES CHILDRENS ACTIVITIES @ REC CENTER CAMPING LAKE ACTIVITIES POW WOW FESTIVITIES</p>
<p>SEPTEMBER</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS</p> <p>SCHOOL / WINTER</p>	<p>OCTOBER</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS TRICK-O-TREATING</p>	<p>NOVEMBER</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS</p>	<p>DECEMBER</p> <p>CRAFTING @ REC CENTER INDOOR BASKETBALL LEAGUE @ REC CENTER CHILDRENS AFTER SCHOOL PROGRAMS</p>



WILL CONDITIONS IMPROVE?

Through the implementation of public spaces such as a community center, central plaza and Pow Wow, cohousing, gardens, sports fields, memorial, and playground and through a more cohesive community layout, Pine Ridge residents will hopefully begin to slowly improve their health, safety, ability for economic advancement and community involvement.





AARON HUEY, photographer

Aaron spent 7 years amongst the Lakota people of Oglala. During his time there, he documented their stories and took many beautiful photographs. He's an award winning photographer and has had his work on the Pine Ridge Reservation featured in National Geographic. He's a reoccurring speaker at numerous TED talks and is an activist in the 'Honor the Treaties' movement. I'm thankful for the life his photos brought to this project.