### WARRIOR'S RANCH

#### RESEARCH: P.T.S.D.

Associated Symptoms of PTSD:

0 Anger

o Depression

o Chronic Pain

o Sleep Disorders

0 Insomnia

0 Night Terrors

 $\circ$  Substance Abuse

o Alcoholism

0 Suicide

 $\circ$  Many other symptoms...

"Posttraumatic stress disorder (PTSD) is a psychiatric disorder that may occur in people who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, or rape or who have been threatened with death, sexual violence or serious injury." (American Psychiatric Association, 2020)

#### RESEARCH: HISTORY

- Early Accounts of Psychological Wounds of War
  - Literature: Epic of Gilgamesh (2100 B.C.)
  - First Written Account: 440 B.C. by Greek Historian Herodotus
- Nostalgia 1688
  - "Nostos" meaning homecoming and "algos" meaning pain
- Soldier's Heart Civil War Era
- Shell Shock World War I
- Battle Fatigue World War II
- Post-Traumatic Stress Disorder 1980
  - Diagnostic and Statistical Manual of Mental Health Disorders Version III (DSM-III)

#### **RESEARCH: STATISTICS**

It is estimated that one in eleven people in the United States will be diagnosed with PTSD in their lifetime (American Psychiatric Association, 2020)

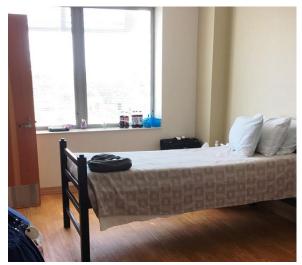
It is estimated that between 11-20 out of every, one hundred veterans who served in either Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) suffer from PTSD in a given year.

(National Center for PTSD, 2018)

23 out of 100 women reported sexual assault when in the military.

(National Center for PTSD, 2018).

#### RESEARCH: MODEL V.A. -



VA Hospital Room Layout



Department of Veterans Affairs Hospital - Fargo, ND



VA Hospital Floor Plan – Portland, OR

#### RESEARCH: STORY BEHIND THE THESIS









#### DESIGN: OVERVIEW

#### **Project Typology:**

Domiciliary Mental Health Rehabilitation Facility

#### Location:

Dickinson, ND



#### – DESIGN: OVERVIEW –

Why? / When?



#### DESIGN: USER/CLIENT DESCRIPTION

**Client:** Department of Veterans Affairs

Users:

(24) – Residents

(6) - Doctors

(14) - Nurses

(3) – Administration Staff

(6) – Kitchen Staff

(6) – Custodial and Maintenance Staff

(5) – Security Staff

Family & Visitors

#### DESIGN GOALS

#### "Toward a Framework for Designing Person-

#### Centered Mental Health Interiors for Veterans"

by Lisa Sundahl Patt, M.S., Sheila J. Bosch, Ph. D., and Daejin Kim, Ph.D.

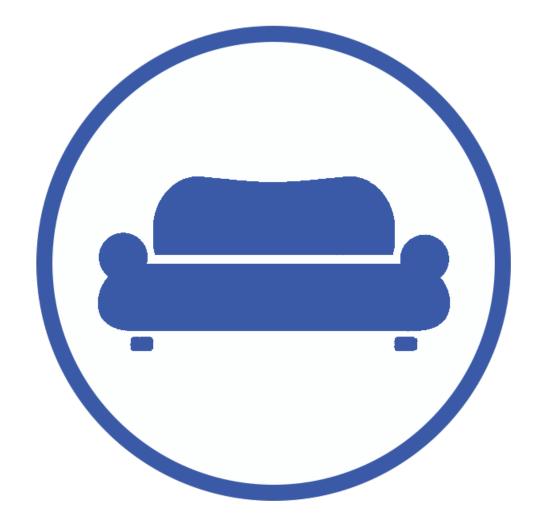


(Sundahl Platt M.S., Bosch Ph.D., & Kim Ph.D.)

#### DESIGN GOALS: COMFORT

#### Comfort:

- Create spaces that allow the veterans to feel comfortable enough to call the facility "home"
- Create spaces that enable the veterans to become vulnerable
- Create direct sightlines from places that the veterans will frequent to entrances, exits, and areas of movement
- Give the veterans and staff the ability to control artificial lighting levels as well as direct daylighting into spaces



#### DESIGN GOALS: PERSONALIZATION

#### Personalization:

- Allow the veterans to customize their surroundings to provide a sense of "ownership"
- Give the veterans and staff the ability to control artificial lighting levels as well as direct daylighting into spaces. (Give them control of their surroundings)

#### DESIGN GOALS: ENGAGEMENT

#### Engagement:

- Arrange living layouts near or around group spaces in order to encourage engagement with other patients and staff
- Provide multi-layered engagement options (Patient-to-Patient, Patient-to-Staff, etc.)
  - Will allow the veteran to become open with others
- Create spaces that enable the veterans to become open and vulnerable with their fellow veterans "Community Belonging"
- Introduce Traditional, Non-Traditional, and Homeopathic means of treatment
- Create outdoor treatment options

#### DESIGN GOALS: PROTECT

#### Protect:

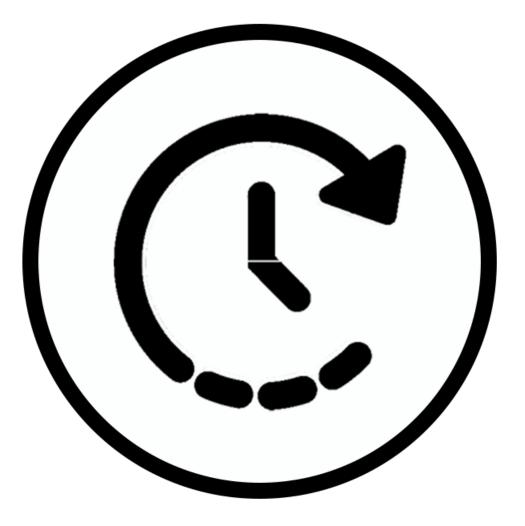
- Allow the veterans to customize their surroundings to provide their own line of defense against unknowns
  - Will allow the veteran to prioritize their own living spaces in order to address the unknowns
- Eliminate Empty, Dark Corners
- Create direct sightlines from places that the veterans will frequent to entrances, exits, and areas of movement
- Provide glazing so that veterans may see "threats," however, also limit glazing so that "threats" can not see them.



#### DESIGN GOALS: LONG-TERM -

#### Long-Term:

- Provide families with the services and information to better understand the early warning signs of PTSD or other psychological disorders
- Provide a long-lasting community that veterans may contact after treatment in case things come up
- Better understand current healthcare design and analyze portions for future approaches
- Develop using healthcare facilities with the six domains of person-centered design



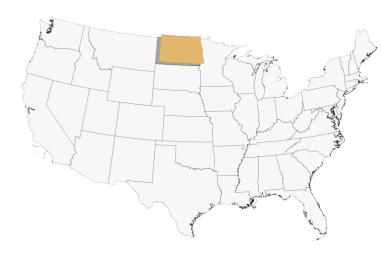
#### DESIGN GOALS: SUSTAINABILITY

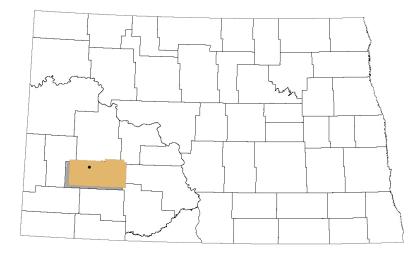
#### Sustainability:

- Apply LEED and WELL thinking strategies
  - Daylighting
  - Quality Views
  - Optimize Energy Performance
  - Passive Cooling / Heating
  - Indoor & Outdoor Water Use Reduction
- Rainwater Management



#### SITE: DICKINSON, ND







#### SITE: EDWARD ARTHER PATTERSON

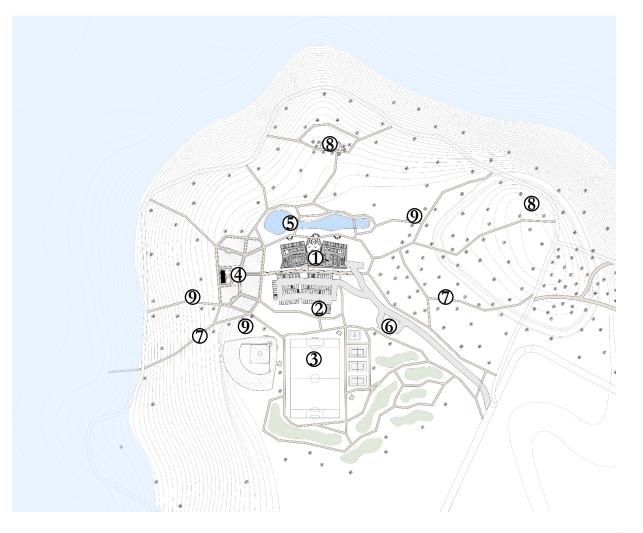
The site was chosen due to its serene environment and expansive shoreline along Edward Arthur Patterson Lake. Due to the site being located in a rural setting, it will provide a more relaxed environment that will allow the facility to offer a more homeopathic and nontraditional means of treatment, while also providing a semi-structured treatment plan for each veteran.



#### SITE: SITE PLAN

#### 1 Building

- 2 Activities Building / Maintenance
- 3 Activities Field
- 4 Community Gardens
- 5 Water Garden
- 6 Memorial
- 7 Walking / Hiking Paths
- 8 Meditation Spaces
- 9 Pavilion



#### DESIGN: FORM



#### DESIGN: EXTERIOR -



#### DESIGN: ELEVATIONS



WEST ELEVATION

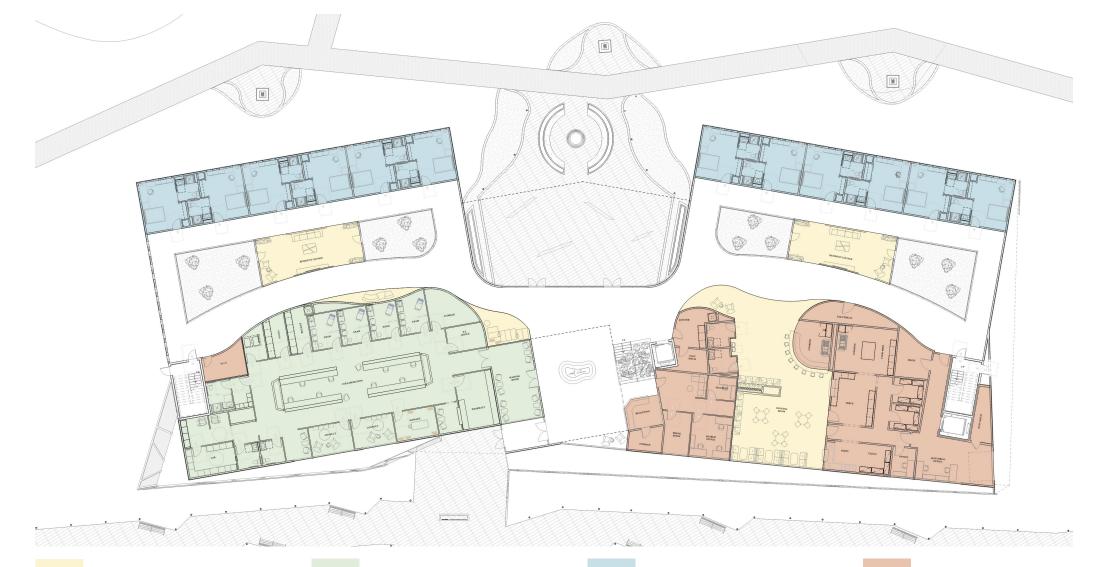
SOUTH ELEVATION



EAST ELEVATION

NORTH ELEVATION

#### - DESIGN: FIRST FLOOR PLAN



COMMUNITY SPACE

CLINICAL SPACE

REDISENTIAL SPACE





#### FIRST FLOOR: CLINIC



#### 

#### FIRST FLOOR: PATIO



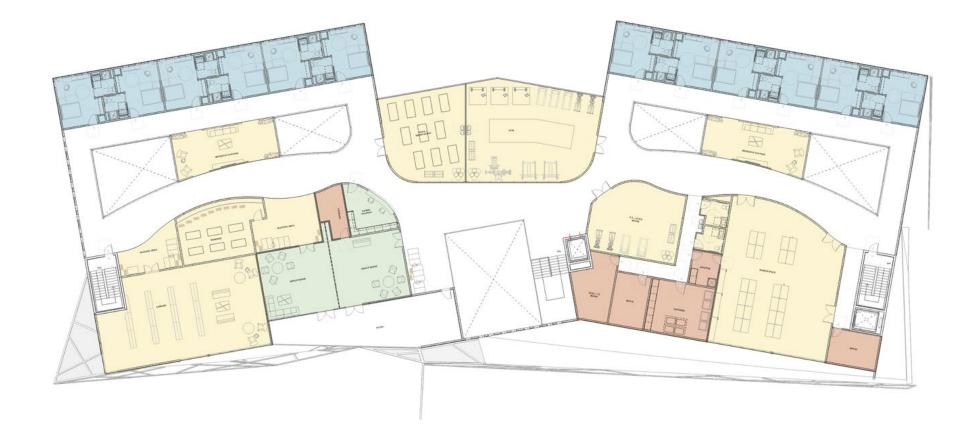


# $\mathbb{C}$ FIRST FLOOR: PATIENT ROOMS

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#### FIRST FLOOR: PATIENT LOUNGES

#### **DESIGN: SECOND FLOOR PLAN**





#### SECOND FLOOR: MAKER SPACE





SECOND FLOOR: GROUP THERAPY





#### SECOND FLOOR: LIBRARY





SECOND FLOOR: LIGHT TUNNEL



#### • DESIGN: SECTIONS





LONGITUDINAL SECTION





TRANSVERSE SECTION: OVERHANG

TRANSVERSE SECTION: LIVING AREAS



'It's about how we treat our veterans every single day of the year. It's about making sure they have the care they need and the benefits that they've earned when they come home. It's about serving all of you as well as you've served the United States of America.''

– Barack Obama

