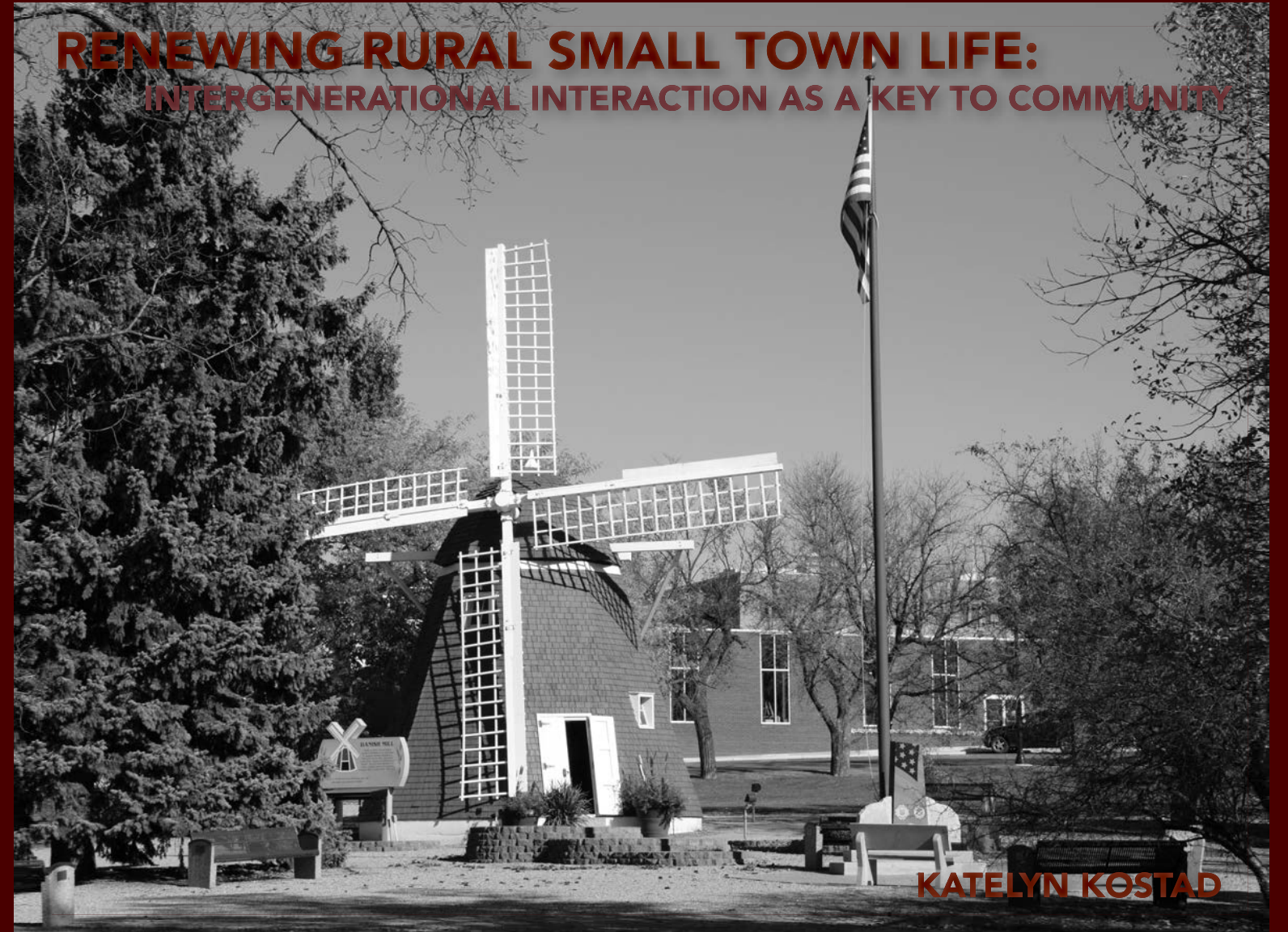


**RENEWING RURAL SMALL TOWN LIFE:
INTERGENERATIONAL INTERACTION AS A KEY TO COMMUNITY**



KATELYN KOSTAD

**RENEWING RURAL SMALL TOWN LIFE:
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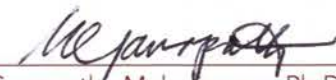
A Design Thesis Submitted to the
Department of Architecture and Landscape Architecture
of North Dakota State University

by **Katelyn M. Kostad**

In Partial Fulfillment of the Requirements
for the Degree of
Master of Architecture



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“provide options
for interaction”

**RENEWING RURAL SMALL TOWN LIFE:
INTERGENERATIONAL INTERACTION
AS A KEY TO THE COMMUNITY**

Thesis Abstract

This thesis explores a possible answer to the question: how would a rural community be renewed through reawakened development?

The Irvin Hotel is an often overlooked, abandoned building located in downtown Kenmare, North Dakota. This thesis explores the possibilities of historic preservation and adaptively reusing the hotel as an independent living facility, hotel, apartments, dining, and event venue. This thesis also explores the benefits of creating an all age center for social interaction featuring recreational activities and spaces for gathering on a vacant corner lot located downtown.

This thesis focuses on renewing community spirit through architecture and reviving the quality of small town living. The hope of small town living will be reawakened by offering the community features that may be available presently but not to the degree necessary and by offering new services to connect the community. The new services will work together to unite the community by prominently placing elderly in the downtown core and allowing interaction between generations throughout every service.

Narrative

This thesis explores how a community can be united by programmed spaces within renewed development of an overlooked, abandoned hotel and a vacant corner lot located in the downtown core. This thesis will focus on renewing community spirit and reiterating the idea the town is worth the investment. Architecture should unite generations through added opportunities to interact. The elderly should not be “locked” up in a secure establishment and restricted to a time schedule instead, more opportunities will be made for them to interact with the community. This thesis explores rebuilding the downtown atmosphere and providing more options for the residents and guests of Kenmare, North Dakota.

This thesis explores renewing a small community of 1,200 residents in Kenmare, North Dakota. A rural community that has built its foundation upon history and loyalty. Emphasis on these values enrich one’s life by instilling a sense of belonging to their community because of the roots and traditions that ground them to that area. A rural community relies on volunteers who dedicate time to serve on different committees to improve their town as well as professionals and

entrepreneurs who are willing to provide services within the town so it can be self-sustained. Within a small town, everyone is a crucial member in the overall picture which increases their wellbeing and satisfies their need of belonging. This thesis not only explores multiple types of residential living and social opportunities but also explores interaction among generations. A center for social interaction is a necessary feature the community should have in order to *provide options for interaction throughout all seasons and for all ages.*

The general conditions of this project exhibit a typical rural community that is self-sustained by meeting the necessary health, economic, and social aspects. The population has little diversity dispersed throughout the 1,200 residents and an aging population. The town offers a downtown core with recent economic development that brought new additions to the square: coffee and sandwich shop, antiques and home decor by consignment, clothing store, and another fitness facility. A new dimension is added to the community through this thesis because of the new entertainment venues.

This thesis explores options for investment that are not necessary for survival but necessary for one’s social wellbeing.

The *social* aspects of this thesis focus on intergenerational relationships forming between the elders and younger generations of the community. This goal will be met in two ways.

First, independent living will be integrated with residential apartments in a hotel setting. The typical assisted living facility becomes a mixed use intergenerational building with continual activity because of the various hours of occupation throughout the different functions of the building.

Second, the center for social interaction becomes a place that all ages are welcome any time of the day. An example of a possible interaction across generations occurring in this center for social interaction could be a water aerobics class being held during swimming lessons or a pool party taking place during a casual pickup game of basketball while a luncheon takes place in one of the meeting rooms provided. The facility creates

opportunities for various community members to interact with one another which may not happen on a typical basis without this center.

This thesis focuses on the *cultural* aspects of a rural town. This project does not promise increased diversity among ethnicities, but does among ages. The norm of a small town used to be everyone knows one another. The focus of this project is to recapture the essence of a small town: sense of security, friendliness, and sense of belonging.

This thesis offers many *economic benefits* to the community of Kenmare. The center for social interaction potentially could be city owned for the center to be purely a public space. The project addresses the need of facilities to be available to anyone and everyone without having to plan to reserve a space. The project addresses the need for independent living where the elderly can be observed and assisted when necessary but allowed to abide by their own time schedule. The project also addresses an overlooked, abandoned building that is sometimes seen as an “eye sore” and gives it the attention it deserves

and preserves its historic character. The project takes a capable building shell and rehabilitates it to make an economic profit. A new restaurant is an necessary addition to the town to provide more dining options to all residents and guests. This restaurant will operate among the five existing restaurants located in Kenmare, two of which are located downtown. Additional venues allow the community members to have more options for various occasions including wedding receptions, family reunions, bridal showers, company parties, and etcetera. The project also encompasses a place to interact with community members that is not a gym, restaurant, bar, or one's home. The overall goal economically is to fill the voids of the community.

This thesis explores reawakening a historic hotel building built next to the railroad in 1915 during a time that traveling by rail car was the common way to travel long distance across the Midwest. In the 1980s the hotel's first floor was semi-transformed into small apartments. Since 1989 the hotel has been abandoned and vandalized on a few occasions. The three-story brick building with a partially recessed full basement has

become overlooked since, and its history has become a mystery to most residents of Kenmare. Some believe this building has surpassed its life expectancy and should be cleared from existence; others do not give it a second thought because it is located just beyond the main traveled route of downtown Kenmare.

The second portion of this thesis explores answers on how to unite the community through reawakening development. The solution includes a center for social interaction that encompasses the ability for recreation and interaction to fill the voids of services not provided to the community of Kenmare. This center for social interaction will have many amenities available for use by all anytime of the day through membership or small fees. These amenities will include a full-sized basketball court, an indoor pool, therapeutic pool, and an outdoor hot tub. The center will also house meeting rooms to serve any event. An important emphasis of this proposal is for the gym portion to remain open to all anytime of the day; if the gym were to be reserved for a special event, then the other public gym located in the existing Memorial Hall must be unreserved

for that time frame to meet the initial idea of providing a place for anyone and everyone to enjoy whenever their schedule suits. The center for social interaction should be available for the spontaneous pickup game of basketball or pool party. The center's main amenities are not meant to be reserved but remain available for any spur of the moment plans for all guests and residents of Kenmare.

Residential, Hospitality, and Recreation Center typologies are individual parts of the solution proposed because *when these typologies are developed and used in conjunction they will benefit the community more than if developed separately*. These typologies help reawaken the rural community because they offer interest and bring more people to the downtown area to improve commerce among local merchants. Both of the sites offer convenient access to plenty of on-street parking. I chose these two sites in particular because they are located downtown Kenmare among the twenty-five businesses located across the town square. Many other businesses are located within one or two blocks of the town square as well. The area is

easily walkable and offers many of the necessary services and mercantile without having to drive. The two grocery stores in town are both within one block from the town square.

The theoretical aspect of this thesis asks how a rural community would be renewed through reawakened development. The community can be renewed and reawakened through adaptive reuse of an overlooked, historic, abandoned building and through additional new development to suit the small rural town needs.

The overall goal is to give back to a community that shaped who I am and show the residents of Kenmare their town is worth investing in even if it is a small town no one has heard of.

intergenerational interaction, community, rural development, historic rehabilitation, residential, recreation, heritage renewal, landmark hotel

Project Typology

Historic Preservation/Adaptive Reuse

- The Irvin Hotel was constructed in 1915 and has been abandoned since 1989. This thesis explores ways to adapt the building into a functional and operational building in the present environment.

Hospitality

Hotel

- The first floor and lobby will be restored as if it were opening day in 1915. Guest rooms may have a sink, full bathroom, or no plumbing. Space will be adapted to fit a men's and women's bathroom.

Restaurant

- A restaurant will be set up as it was in 1915. The partially recessed basement offers plenty of daylight for a basement kitchen and dining room along with a banquet room for entertaining.

Residential

Independent Living

- The second floor will be transformed into efficiency, one, and two bedroom apartment units, so one can feel at home even though they have medical assistance nearby if needed.

Apartments

- The third floor will be transformed into efficiency, one, and two bedroom apartments geared towards families and individuals looking to live close to the downtown area of Kenmare.

Recreation Center

- A center for social interaction will be home to many social events to engage members of the community with each other across generations.

Meeting Rooms and Venues

- The goal of the meeting rooms is to offer different sized spaces for gatherings to take place. The meeting room can be reserved for a bridal shower or a family reunion. The space offers neutral ground similar to what the Kenmare Country Club, Memorial Hall, and church basements offer presently.
- The meeting rooms shall be multi-purpose to suit a variety of events from business luncheons to formal occasions.

Table of Typological Case Studies

Overview of Typological Research

Great Northern - **Community**

Eventide on 8th Street - **Home**

Riverview Place - **Independent**

Alcott Manor - **Neighborhood**

Old Faithful Inn - **Historic**

The Wave - **Community**

Wallman Wellness Center - **Active**

Courts Plus - **Club**

Hazel Glen Child and Family Centre - **Children**

Casa Grand and Casa City Clubhouse - **Private**

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Typological Research

The research of this thesis will be based on case studies similar to the project typology, town size and needs, and intergenerational relationships. This thesis explores many different avenues of typologies.

I will apply the following lessons I have taken away from the case studies throughout the process and final design phases of the thesis solution.

The Alcott Manor and Great Northern apartments **focus on preserving the historic fabric** of the building and only altering interior partitions. In comparison, Courts Plus and Wallman Wellness Center take two approaches to the facilities. I think it would be **wise to combine daylight and color to improve the atmosphere** of the center for social interaction.

Independent Living

The overall goal of locating the Independent Living downtown is to promote the elderly remain connected to their beloved community. Nurses will consult individuals within his or her apartment. The independent living program will

implement the “Care Point” system for residents to offer more individualized support.

Guest rooms for visiting family and friends will be available via the hotel located on the first floor. One goal will be to provide places that are neutral and inviting to families and guests. A community room shall be available with a kitchen for family meals or resident gatherings. Niches and lounges shall be arranged to promote discussion among neighbors. A chair will be placed within the elevator for the elderly in mind.

Residential

The apartments shall be constructed with an open, flexible layout. The apartments must remain constrained within the existing double-loaded corridor with a depth of 11'-6" or 16'-4".

Historic Hotel

The Old Faithful Inn has installed a sink within every room and other improvements for guest's comfort but the original integrity remains. Other upgrades include electrical, heating system, and noise isolation between guest rooms. The Irvin Hotel will need to undergo complete

electrical and plumbing upgrades to meet code. Guests use a shared bathroom on each floor, a sacrifice that is willingly taken to experience an atmosphere of an earlier era.

Center for Social Interaction

The overall presence of the center should be active and provide a night presence for the downtown core besides the fitness centers and bars located downtown. The building must maximize daylight throughout all uses. For the building to have many different functions, I think it is wise that the center for social interaction has upscale interior finishes resembling a “country club.”

The amenities provided shall be unreserved and available to all users anytime that fits into their schedule. One of the pools perhaps the therapeutic pool should have a consistent depth to avoid elderly slipping into deeper water. Locker rooms should be looked at to provide “wet” versus “dry” accommodations and age appropriate locker rooms as The Wave implemented.

Lounges shall be available to promote chance

interaction among community members and intergenerational relations. Ample storage should be allocated throughout the center to provide uncluttered event venues. Storage rooms will be needed to store chairs, tables, exercise equipment, and other items not used during a particular event.

Great Northern

Community

Location: 201 4th AVE NE
Devils Lake, ND 58301

Typology: Historic Preservation, Adaptive Reuse Residential and Commercial

Size: 38 Apartments
5,000 SF Commercial

Built: 1909-1911 **Rehabilitated:** 1980

The Great Northern Hotel used to serve as the grand gateway to the city of Devils Lake. Most of the initial commercial development was connected to railroad expansion. The weary travelers sought a good meal, shower, and clean bed. Rooms were available for 75 cents or 2 dollars with a bath.

“Railroad men as well as elegant ladies strolled plush carpet and sipped drinks in a grand ballroom originally graced with velvet dressed windows and floors of decorative tile.”¹

The Great Northern Hotel fills a triangular lot very similar to the historic rehabilitation portion of this thesis exploration. The style represents Beaux Arts and Neo Classical features. Arched windows and slightly projecting piers divide the facade.



Figure 10.1 - Great Northern

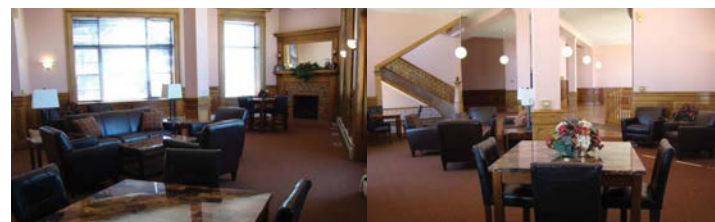


Figure 10.2 & 10.3 - Great Northern Lobby

Stenson says, “The lifestyle and small family size of senior citizens fit well into the renovation.”²

The Great Northern Hotel would have met the wrecking ball if Gary Stenson did not buy the hotel in 1978. Gary Stenson, founder of MetroPlains Management, LLC, is a Devils Lake native and could not bear to see this piece of history be demolished.

“I remember teen canteens in the basement of the hotel, going to the dentist who had an office there, and my parents taking [us] to eat in a cafe there,” he recalls.³

He purchased the hotel for \$30,000 from Ramsey County and renovated the old hotel into affordable senior citizen apartments. The apartments range from 519 to 826 square feet and four different layouts. Thirty-five apartments are one bedroom and three are two bedroom. Some of the apartments are subsidized under the Federal HUD Section 8, as a result some residents only pay \$25-50 a month for rent.

¹(McCroskey, 1989, p. 19)

²(Jossi, 1993, para. 15)

³(Jossi, 1993, para. 2)

Figure 11.4 - Great Northern c.1915-1920

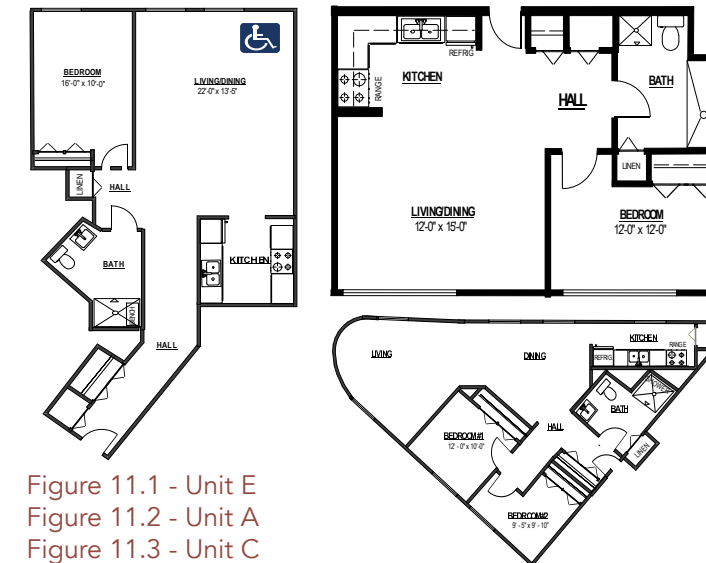


Figure 11.1 - Unit E
Figure 11.2 - Unit A
Figure 11.3 - Unit C



Eventide on 8th Street

Home

Location: 1405 7th St S
Moorhead, MN 56560

Typology: Independent/Assisted Senior Living
Size: 2 Living Centers & "Main Street"



Figure 12.1 - Eventide Living Center



"Staff here are very helpful and kind. It's the little things, like sending me a photo of mom with the flowers I sent her."

Figure 12.2 - Atrium of "Main Street"

Eventide has a great welcoming atmosphere. I toured the independent living buildings and their "main street" area that features amenities for nursing home and independent living residents. Eventide had the feeling of home. The atmosphere was better than most apartment complexes. The facility was absent of the usual odor associated with elderly homes and had no impression of being an institution. Julie, the housing manager for the independent living, who gave me a tour of the facility **greeted any resident we crossed paths with by name.**

Eventide's mission strives to "enhance the quality of life for those we serve reflecting our Christian values."

Eventide's Living Center also known as the independent or apartment living option features one and two bedroom apartments. The atmosphere encourages social interaction with other residents through the activities scheduled and the **small niches that allow residents to gather** for coffee or gossip as one resident stated.

The facility has a wellness center and "main street" open to the public. "Main Street" is a great place for residents to meet with family and friends along with many of the seating areas that are available throughout the buildings. One of the community rooms also **features a full kitchen for families to use** if a resident's apartment does not have enough space.

Eventide's "main street" offers a place for all residents to meet and gather. The area features a big atrium and sculpture and plenty of daylight. The amenities include a theatre/meeting room, computer cluster, chapel, gift shop with bread and milk for in-between grocery trips, and a reasonably priced cafe called the Eventide Grill. Residents within the independent living style must pay at time of purchase and are not allowed to charge to their rent account.

One feature which is simple, yet beneficial is their mail area. This area features the typical USPS mailbox, a cubby for inter-mailings from Eventide to the residents for every unit, and displays information about Eventide events. The daily specials for Eventide Grill along with the weekly menu for the two dining rooms and information about other upcoming events. Sign-up lists are

conveniently placed here for residents to easily access. For example, one sign-up list is for residents to schedule transportation to medical appointments and other outings not planned by Eventide.

A variety of activities are scheduled similar to many other facilities. Eventide allows residents to choose which activities they will partake in. Julie mentioned she may see a resident only once a month when he or she pays rent or it could be six times a day. The activities provided include music, card groups, Wii bowling, exercise, Bible study, games, bingo, coffee, movie & popcorn,



Figure 13.1 - Eventide mail area

along with arts and crafts. Their public outings include grocery shopping once a week, watching a Red Hawks game, going out to lunch, and other outings within the Fargo-Moorhead community. Schwan's stops by once a month for residents as well.

The independent living center features a beauty salon, two-story library and seating area with a grand staircase and large array of windows to allow for ample daylight for reading. The first floor has televisions located near gathering spaces to announce upcoming events and daily schedule. Secure courtyards and walking paths encourage residents to spend time outdoors. Many covered porches and seating areas are also available to residents and guests.

The apartments range in size and offer sixteen different layouts. One bedroom apartments



Fig. 14.1 - First Floor Hall Fig. 14.2 - Second Floor Hall



Figure 14.3 & 14.4 - One bedroom apartment - The Poplar range from 471 to 905 square feet. Two bedroom apartments range from 676 to 1,089 square feet. Each apartment features a full kitchen, bay window, individual climate control, emergency response system, walk-in showers, and window treatments. Each entry is recessed creating two narrower walls available for a resident to personalize their "home's" entry. Most units also include a washer and dryer and a few layouts include a fire place. A shared laundry room is located on each floor for residents who do not have a washer and dryer located within their apartment.

Most residents live alone or with a spouse within their apartment. Julie mentioned that twelve couples are currently living within the center. The

only roommate situation Julie has seen with was a mother and daughter. If residents choose to rent a two bedroom apartment, then the second bedroom is used for extra space and storage.

Residents have the option to eat the continental breakfast included within the monthly rent. They also have the option to purchase lunch and supper for \$9 per meal or purchase a meal plan. All residents located within the independent living program have a reduced-size kitchen with full functions to prepare their own meals. Meals are served similar to a formal restaurant setting with linens and cloth napkins.



Figure 15.1 - Dining room and community space

Each resident, if able, can prepare their own plate from the salad bar or a staff member can prepare a plate for him or her. The rest of the meal is delivered to the table on individual plates by staff. Each dining room includes a kitchen where dessert and entree items ordered from the standard menu are made. If a resident prefers not to have the meal served that day, then he or she can order an entree off of the standard menu. The main kitchen located near the nursing home portion of this specific facility prepares all of the daily main entree items served.

The monthly fee includes utilities, cable but not telephone, daily breakfast, weekly housekeeping, scheduled transportation, activities and events, fitness center and therapy, staff present 24/7, daily wellness check, fully-secured building with key card access, and routine apartment maintenance. Transportation is free to any medical appointment but there may be an additional charge for transportation to other locations.

The nursing staff includes one full time RN and one that comes in two days per week. Both are on call 24/7 via phone. In addition, CNAs come in for the night shift and do common

cleaning throughout the facility, disperse night medications, and assist night owl residents. A nursing office is located adjacent to the housing manager's office. The space, however, serves as an office and place to store supplies and not as an exam room. The nurses visit the resident's apartment for consultation.

The care for each resident can be customized to fit their needs. Eventide offers an interesting "care points" system. The services offered are as simple as medication set-up, escort service to meals or activities, or daily walks to more extensive services including bathroom and



Fig. 16.2 - Occupational Therapy

bathing assistance. The additional health services fee is based by the number of points a resident requires. The fee is out-of-pocket because Eventide cannot bill Medicare directly. Haugo Wellness Center is not your typical wellness center. The wellness center looks like a very well decorated living room. The space is spacious and flooded with daylight. Even though the space had weight machines it is carpeted and lacks the typical odor of a workout space. A portion of the wellness center is used for therapy. A full kitchen is available to help patients with occupational therapy. The center also offers speech therapy and outpatient therapy. A



Figure 16.1 - Two story library

resident can request to have their therapy held within house so they do not have to travel to therapy sessions located elsewhere.

A few small details an architect may not think of which I noticed at Eventide would be placing a chair within the elevator for residents. Julie also mentioned that having a couple collapsible carts and wheelchairs located near doorways are nice for occasional use by residents. An example, would be when a resident returns from grocery shopping instead of owning their own collapsible cart they could borrow the facility's to haul the groceries up to their apartment.



Figure 17.1 - Outdoor pathways

"We are so grateful for the care and support my aunt is receiving. Everyone goes above and beyond."

Riverview Place

Location: 5300 12th St S
Fargo, ND 58104

Typology: Senior Living (independent/assisted)

Size: 6 building complex

Independent

The campus is composed of six buildings placed on site in a radial design are all connected by walkways around a central courtyard with walking paths. The buildings are labeled “A” through “E” for residential wings, and the Main Building is located within the center providing services to the residents.

The atmosphere leans toward a better atmosphere than typical apartment buildings. The only hint its not a typical apartment building is the guard rails located 3’ above floor level. The colors tend to be warmer consisting of a warmer palette. The Main Building consists of many windows providing natural daylight into the public spaces. One recognizes the absence



Figure 18.1 - Looking South towards Riverview Place

In 1987, the convent was transformed into a retirement community encompassing 148 independent apartments for adults aged 55 and older. In 1996, Catholic Health Initiatives took sponsorship over from the Presentation of Sisterhood. Riverview currently offers on-site health services to 160 residents.

CHI Riverview’s emphasizes “human dignity and social justice as we move toward creation of healthier communities.”



Figure 18.2 - Courtyard

of the institutionalized atmosphere and lack of typical odor usually associated with elderly housing while walking the halls.

At 1:30, not many residents were walking around showcasing how independent the facility is. The activities director, Rene, said another reason for the halls being so inactive was because not many activities were planned during afternoon nap time. Although, other events were still scheduled during the time including coffee break and cards along with a water aerobics class.

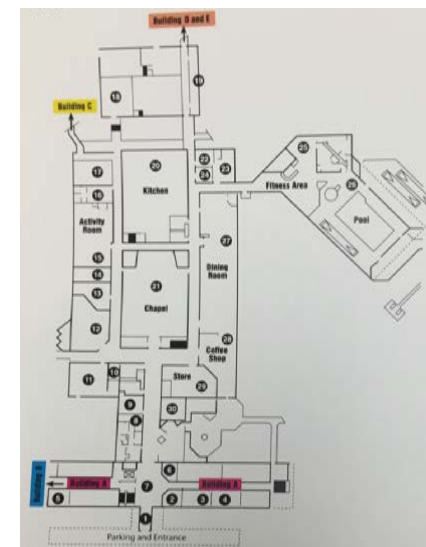


Figure 19.1 - Public Spaces Layout



Figure 19.2 - Riverview West Facade

The amenities are arranged within a figure 8 design to improve circulation among the community spaces. The chapel and kitchen are centrally located with a hallway dividing the two spaces. The other spaces form a U around the buildings from North to South. The services located on the North include shared laundry facilities, beauty salon, community room used for cards, coffee, and other activities, library, computer stations, and multi-purpose room follow. The multi-purpose room is carpeted and used for yoga, movies, and various meetings.

The gift store located in the southwest corner

of the Main Building provides standard items needed between grocery trips, i.e. bread and milk, toiletry items, and gift items. The gift store is set up like a small convenience store that has the capability of charging to the room or paying for at time of purchase. Riverview also schedules Schwan's delivery once a week for residents.

The coffee shop with ample daylight and views of the courtyard is a **great place to meet with fellow residents or family members**. The formal dining room adjacently located offers restaurant style dining. Residents choose from a menu of options and interact with other residents within a formal dining setting. A link located near the dining room leads to the fitness amenities of Riverview. The link opens up to a TV, fitness equipment, pool table, whirlpool, and a moderate sized pool with a consistent depth of four feet where various aqua classes are held throughout the week. Residents can use their green thumb or enjoy the quiet serenity within the greenhouse.

Riverview provides many opportunities for social interaction that residents may choose to partake in. The facility does not force any of the residents to follow a schedule. Opportunities include reminiscence discussions, i.e. What were you doing



Figure 20.1 - Coffee Shop

"I love living at CHI Riverview. The pool, fitness center, and library are some of my favorite things."
 - Dick Bergantine



Figure 20.2 - Greenhouse

Figure 20.3 - Water Aerobics

October 15, 2015

in the year 1960?, spelling bees, bingo, birthday parties, therapies, men's club, aqua classes, exercise classes, movies and popcorn, arts and crafts, card groups, Bible studies, chimes, i.e. learning how to play an instrument, choir, and day trips out on the town.

Riverview engages the community by inviting them into their facility for different events. These opportunities allow the residents to engage with younger generations and remain connected to the community. Two examples of events happening this fall include Apple Dumpling Day and Wine & Dine Around the World. Throughout the year, aerobics classes are open to the public along with worship services.

Most residents still own their vehicle and use it regularly. CHI Riverview even offers attached



Figure 21.1 - Library

Figure 21.2 - Group exercise

garages for residents living on the first floor. A resident can lock the door to their garage and cross a hallway to access their apartment. Transportation services are also available between 9:00AM and 4:30PM at an additional cost for daily errands, i.e. grocery shopping and banking, along with access to public transportation. Twenty-four hour service for healthcare is included with monthly rent along with laundry and housekeeping, paid utilities, and check cashing. A guest apartment is available at a night rental rate for visiting family and friends.

The apartments throughout the facility can be designated as independent or assisted allowing residents to remain within their apartment as assistance needs increase. One and two bedroom options are available along with options for seasonal rental with furniture and reduced rates for residents who occupy their apartment only during summer or winter months. Short-term stays are also available for one to six months. CHI Riverview offers eleven apartment layouts. Within the independent living option, the resident remains independent but the **staff handles various chores and home maintenance items** like taking the trash out or cleaning the apartment.

The health services are provided by licensed nurses that are on call 24/7. All residents receive the following services without additional charge: liaison with physician, discharge planning, syringe disposal, exercise programs through the activity department, and free transportation to all medical related appointments. Many other services are provided including coordination of appointments, medication setup, administration, and reorder, blood draw and sugar monitoring, foot care, nurse visits, escorts, tray service, and personal shopping errands. More specific services are offered at an additional cost.

A walk-in health clinic is available on-site in the afternoon M-F from 12:30-2:00 for blood pressure checks, eye drops, injections, weight monitoring, reorder of prescriptions, flu shots, and dressing changes. At Home Therapy Services, an independent company, has a space within the main building to offer physical and occupational therapy services. Residents can request after seeing a doctor that their therapy be conducted within Riverview instead of at the hospital or clinic reducing the need for traveling to receive medical services. In addition, CHI Riverview has a full-time massage therapist available.



Figure 22.1 - Wellness check

Alcott Manor

Location: 1224 Walnut Street
Grand Forks, ND 58208

Typology: Historic Preservation, Adaptive Reuse,
Residential (55+ years and older)

Size: 45 Apartments

Built: 1931

Rehabilitated: 1999

Neighborhood

Alcott Manor was originally established as South Junior High School in 1931. The high school was expanded with an addition in 1956 and 1981. During the spring of 1997, the Red River flooded severely leaving ninety percent (approximately 45,000) residents of Grand Forks residents homeless. The South Junior High School was severely flooded and was never reopened after the flood.

The senior living complex includes twenty-six one-bedroom, fifteen two-bedroom, and four unique loft apartments. The program includes a community kitchen and gathering space, library with a fireplace, exercise room, and beauty salon. The project encompassed demolition of newer additions to the building to allow room for garages, parking, and a new entrance. **The design focused on maintaining the historic fabric of the school.**

The gymnasium was converted into four 1,300 square foot lofts with fifteen foot high ceilings and one-and-a-half baths. These four lofts are included in the fourteen market rate apartment homes. The other thirty-one apartments are required to be income-based and affordable.



Figure 23.1 - Alcott Manor

Old Faithful Inn

Historic

Location: Old Faithful Road
Yellowstone National Park, WY 82190
Typology: Historic Hotel/Hospitality
Built: 1903



Figure 24.1 - Old Faithful Inn 2011



Figure 24.2 - 1904

Figure 24.3 - 2014

On July 23, 1973 the Inn was added to the National Register of Historic Places and designated as a National Historic Landmark in 1987. The original Old Faithful Inn was constructed for the cost of \$140,000 and an additional \$25,000 spent on furniture.

In 2001, the decision was made to undergo extensive restoration starting in the year 2004, Old Faithful Inn's 100th birthday. All restoration work was completed for the cost of \$30 million in 2008, except for the chimney renovation completed in 2012. A&E Architects of Missoula, Montana spent over two-and-half years comparing original drawings of the Inn with what was located present day. Many discussions were held about the proper way to preserve the Old Faithful Inn. Electrical wiring, plumbing, sprinklers, and heating were upgraded to meet code and concealed as much as possible to preserve the historic fabric.

The original 140 guest rooms were suited with steam radiators and electrical lighting supplied by a steam generator; a luxury during the time. The architect Robert Reamer designed white candlestick light fixtures to be placed throughout

the building to resemble typical lighting of the era; many are still in place today. Most materials used were found on-site. Lodgepole pines show throughout the railings and columns in the main lobby. The fire place within the lobby is sculpted of rhyolite, a volcanic rock.



Figure 25.1 - Old house hall

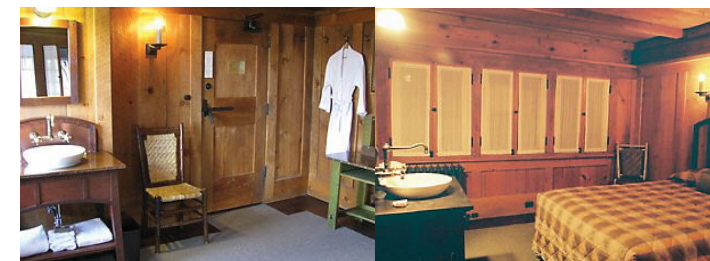


Figure 25.2 & 25.3 - Updated old house room

The Old Faithful Inn is located near the Old Faithful Geyser and obviously is a tourist attraction. The historic hotel features a dining room, deli, lounge, and gift shop to accommodate tourists and hotel guests. Old house room tours are available to share guest experiences from the early days with guests and tourists.

Each old house room had a washstand with towels, a water pitcher and washbasin, and a chamber pot on the lower shelf of the washstand. Guests were greeted by a vase of fresh flowers. Individual touches set all of the old house rooms apart. The guest rooms all range slightly in size and shape. Some rooms are more spacious; others are more confining. Number of windows vary per room; some feature one set and others feature several sets like the photo to the left [Figure 25.3]. Some rooms even have a window seat. The interior first floor rooms have horizontal log faces for all walls. The second and third floor rooms have rough sawn vertical planking. Original furnishings including drop-front chests of drawers and wash stands are still in use throughout some of the 108 remaining rooms.

Although, Old Faithful Inn has had two wings added on to the original structure for additional guest rooms. The **original rooms are the most requested**. Old house rooms have basic accommodations with either one or two queen-sized beds, updated sink, and shared bathrooms with private showers are located down the hall. A limited number of rooms have private baths.

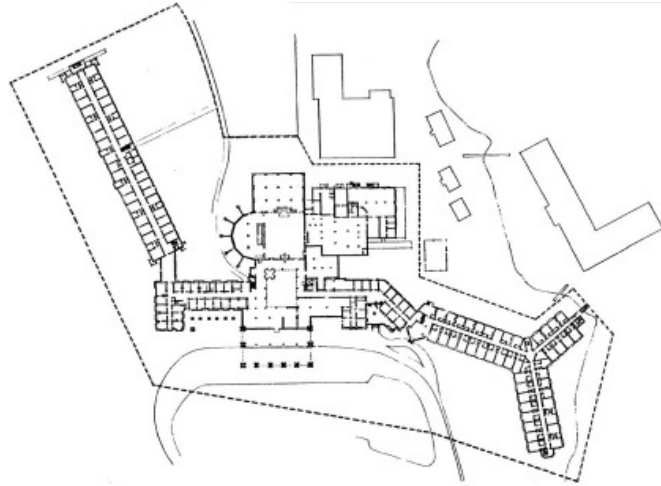


Figure 26.1 - First floor imposed on a site plan

Old house rooms were updated with inset washbasins and retro water fixtures to replace the 1940s era yellow sinks installed after 1904. Radiators were replaced with newer, quieter versions but remain within the original period

style. The radiators were switched over to hot water system from the original steam system installed in 1904. The new system allows individual control instead of staff centrally controlling heat for all guest rooms. The flooring was also replaced to reduce the creaking sounds. The floors represent what once was with dark stained floorboards on the perimeter and carpet within the center to represent what once had been a rug in the center of a guest room.

During renovation, the log walls were numbered, disassembled, and reassembled to conceal updated wiring and insulation. In order to conceal the piping for the sprinkler system, the ceiling was slightly lowered. Electric outlets were added along baseboards, a convenience not available in 1904. Each room features a mirror framed with original floor boards. The window glazing was improved but the original window frames remain intact.

The rooms stay true to the era of 1904 even with the added luxuries because the absence of television, air conditioning, internet, and phone lines remains. **With only the basic needs being met, the room allows a guest to experience an historic stay within the Old Faithful Inn.**



“For most visitors the lobby stands as the structure’s distinguishing feature. From its polished maple floor to the peak of its log paneled ceiling, it measures more than 76 feet in height. The lobby of Old Faithful Inn is a maze of twisted branches, inviting staircases, and welcoming balconies described by one historian as rusticity gone berserk! Upon viewing the lobby, many are drawn beyond, to experience it—to touch its enormous stone chimney, to stroke a beautifully polished log, to inhale the scent of the wood, to listen to the creak of the stairs and the chatter of admirers. This is a building to delight the senses. It is a public space with a strong sense of place where many feel at home. All eyes are carried upward, one gapes and wonders, Who could have imagined this?”

-Ruth Quinn

Figure 27.1 - Looking up within the Lobby

The Wave

Location: 1250 Baker Avenue
Whitefish, MT 59937

Typology: Wellness Center

Size: 65,900 SF (52,000 + 4,700 + 9,200)

Built: 2004-2005 **Expansion:** 2007, 2013

Community

The Wave offers “a unique blend of good old fashioned hospitality and the best in fitness equipment, personal training, yoga, group exercise, aquatics, massage and more.”

The Wave’s program includes private personal training studio, group exercise studios, gymnasium, and racquetball, handball, & squash courts. Spaces are also allocated for a children’s center, party rooms, locker rooms, juice bar, and pro shop. The Wave is committed to providing services for the health and well-being of the community and is recognized as a non-profit organization.

Art Kreuger, facilities director, stated the purpose was to “give the north valley a center with a country club feel at a reduced price.” The lobby features a fire place and seating for members to gather around and socialize. Kreuger refers to the area as a healthy alternative.

The center features family locker rooms, boys and girls locker rooms to separate the members 13 and under from the adults. The party rooms have direct access to the indoor water park, outdoor areas, and have a sink and refrigerator for convenience.



Figure 28.1 - Juice Bar

Figure 28.2 - Group Exercise



Figure 28.3 - Locker Room

Figure 28.4 - Entry



Figure 29.1 - The Wave

The aquatics area includes a 6 lane competition lap pool, 40’ x 25’ warm swimming pool, water park, and oversized jacuzzi. The gymnasium is used for various activities: basketball, volleyball, dodge ball, indoor soccer, athletic performance training, group fitness, and open to other activities.

The design maximizes daylight throughout with the open concept throughout the facility. The structure utilized steel bar joists, composite steel beams, and elevated concrete slabs to make up the primary gravity load system. The lateral system is a combination of concealed braced frames, concrete slabs, and steel decking.



Figure 29.2 - Site Plan

Figure 29.3 - Locker Room

A recent expansion relocated and reconfigured party rooms with a kitchen area. Children’s, men’s, and women’s locker rooms were expanded and reconfigured to allow for more lockers and larger changing areas. Space was reconfigured to suit additional weight lifting equipment. Another studio room was also added to the facility’s program.

The locker room has an upscale atmosphere as one can gather from Figure 28.3. Figure 29.3 shows the expansion of the women’s locker room with three additional bays of lockers and seating available along with a lounge at the entry. Three private changing rooms are located near the lockers and the showering and restroom facilities are located beyond.

Wallman Wellness Center

Active

Location: 1707 Centennial Boulevard
Fargo, ND 58102

Typology: Wellness and Recreation Center

Size: 100,000+ SF

Built: 2001 **Additions:** 2007, 2010, 2015



Figure 30.1 - Southwest View

Wallman Wellness Center is located in the southwest area of North Dakota State University's campus. The center is available for use by all students and faculty, and open to the public for an additional fee.

The center's hours are based around holiday breaks, summer hours, and academic hours. Academic hours range from Monday through Friday from 5:30AM to 11:30PM; Saturday hours from 8AM to 11:30PM, and Sunday hours from 11AM to 11:30PM. The busiest hours for the center are between 6:30 and 9:00PM because of free parking and most students are done with classes and work by this time. There is no need to bring your own basketball or volleyball because the center offers free equipment checkout to all users. The Wallman Wellness Center is open for a wide range of hours to accommodate all student schedules. They offer instructed group exercise classes, fit programs at a fee, intramural sports, and CPR/AED classes. The center is open to last-minute reservations for a casual pick up game of basketball or racquetball game. One can always find a cardio machine within minutes of arrival.

The architecture itself is additive. There are telltale signs of the additions the facility has

underwent but each architecture firm has complimented the previous. The material palette reminds me of the **great plains of the Midwest**. The color scheme is neutral and natural: browns, reds, white, and black. Sun shading devices incorporated within the window assemblies on the south and west facades reduce glare for users inside. The tinted windows preserve daytime views, natural daylight with reduced glare, and user's privacy while preventing passerbys from seeing in.

The curtain wall assemblies located on the south and west facades utilize **abundant natural daylight and fantastic views** of the openness that surrounds the facility. The land to the west has very little development and resembles the prairie that once used to envelop this area. Directly west (across the street) is a plot for wheat studies approximately 1/6 of an acre that was put on the National Register of Historic Places in 1991. The plot has been reduced in size but has been used for wheat research since 1882.

Energetic presence is expressed by users and within the design of the facility. The X-bracing visible through the windows creates an active and dynamic structure. At night, the windows light up



Figure 31.1 - North View at Night

the Wallman Wellness Center within creating a **pronounced presence** within the dark sky. When blinds are not closed, one driving by can see the group exercise room enlivened with activity and people walking around the second floor track around the cardio and weight equipment. The facility is never inactive, even at 6AM. The downfall of the programming and user activity, is when one approaches the North entry at night. From the North, the Northeast portion is darker and more inactive because the main fitness activities are showcased on the South and West facades. The Northeast portion houses the clinic and daycare center which are vacated around five o'clock everyday. The majority of

users access the facility from the North because that is where parking is located and are not greeted by that aura that is easily seen from the SW corner of the building at night. The four level center has a thirty-five foot rock climbing wall located on the first floor along with locker rooms,



Figure 32.1 - Rock Wall



Figure 32.2 - Group Exercise



Figure 32.3 - Racquetball

weight training, one large group exercise room, student health clinic, massage therapy room, meeting rooms, administration offices, lounge, and child daycare. The second level has cardio and weight equipment with a walking track surrounding the equipment, three basketball

courts, group fitness rooms, and restrooms. Court 2 of the basketball courts is utilized for pick-up basketball games. The basketball courts can be set up to accommodate badminton, volleyball, and other activities. Three additional studios are available for cycling, martial arts, and



Figure 32.4 - Multi-purpose



Figure 32.5 - Gymnasium



Figure 32.6 - Running Track

personal training. The third level has a walking track framing the basketball courts below and a few smaller areas for cardio equipment. The basement level accesses four racquetball courts, small seating area, and a ping-pong table.



Figure 33.1 - Section

The height clearances for different areas are deferred from the building section located to the left. The typical fitness area has a ceiling of 12'-0". The gymnasium has a clearance of 25'-4".

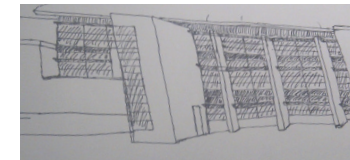


Figure 33.2 - West Sketch

Aquatic Center Addition

In 2013, students decided to appropriate funds towards an aquatic addition to the existing Wallman Wellness Center. The project is budgeted to be \$11 million and will be funded by students. The center includes a leisure pool, six-lane lap pool, vortex, spa, and sauna. The program also includes a student lounge within the leisure pool area and a fire pit between the two pools. In addition, the program includes a "wet" classroom for teaching scuba lessons.



Figure 33.3 & 33.4 - Proposed Addition & Swimming Area

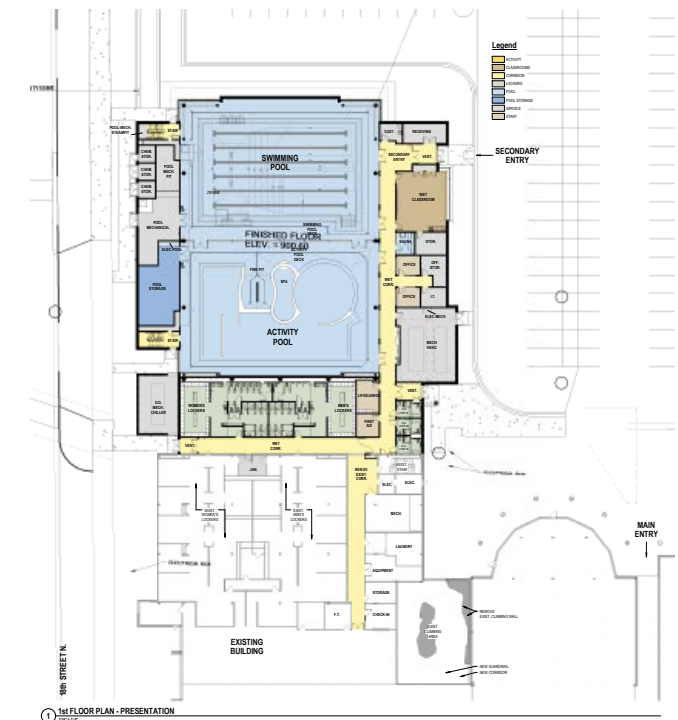


Figure 33.5 - Proposed swimming area

Courts Plus Club

Location: 3491 University Drive South
Fargo, ND 58104

Typology: Wellness and Recreation Center
Size: 87,250 SF

Renovated: 2013



Figure 34.1 - Courts Plus South View



Figure 34.2 - Group Exercise Room

“Home of the no wait workout.”

Courts Plus is a community wellness center. Courts Plus states they have more than 3,026 members workout daily. The center features two basketball, five racquetball, and seven tennis courts along with group exercise rooms, weights and cardio areas plus a pro shop and juice bar and indoor playground with party rooms. The activities breakdown by usage to thirty percent: group exercise and tennis, twenty percent: basketball, and ten percent: racquetball and youth services.

The facility is designed as an additive structure. The front facade is “frosted” to appear like an upscale fitness club. One easily notices the back side is a combination of pre-engineered metal buildings which house the main feature of Courts Plus: tennis, basketball and racquetball courts. The only windows visible to the street are a few within the street-facing facade allowing abundant daylight into the playground and daycare center. The administrative area has a vertical strip of windows. One of the group exercise rooms has plenty of daylight and is a refreshing and suitable place to workout. The West and North wall of the cardio area have smaller punched windows as



Figure 35.1 - Courts Plus Facility Floor Plan

well. Courts Plus is not afraid to use color within the workout spaces which makes a space more vibrant. Most rooms, however, do not provide enough daylight or views to the outside.



Figure 35.2 - Cardio Area

Figure 35.3 - Juice Bar

The facility offers many instructed classes including Insanity, cycling, jazzerobics, Zumba, and other fitness group classes ranging from intense to light exercise sessions. One disadvantage is pick-up basketball games are scheduled to a certain time frame.



Figure 35.4 - Fitness Class

Figure 35.5 - Gym

One of the exercise rooms does not have space to store supplies like aerobic balls and weights for sessions. The room feels cluttered dungeon-like because no daylight or views are available.



Figure 35.6 & 35.7 - Convertible Party Room

The indoor playground that Courts Plus offers was an extension of the FM Junior League's efforts for fundraising. The ladies tripled the fundraising amount to provide a multi-level indoor play park accessible to kids for only \$2 per day.



Figure 36.1 - Indoor Playground



Figure 36.2 - Lobby Area

The lobby and lounge spaces have an **upscale vibe**. The initial atmosphere makes the center feel more like a country club rather than the typical wellness or recreation center. The color scheme is welcoming with a neutral, darker color scheme. The lobby lacks abundant natural daylight and a seating area. The Administrative offices and an interactive room for children surround the front desk. The front desk has two check-in areas: children's center and fitness center. The lobby has a series of coolers offering pop, energy drinks, and sports drinks for sale.

Rolled towels waiting for members as they proceed into the workout facility provide a nice "country club" touch. Men can access their



Figure 37.1 - Locker Room

locker room by a staircase to the left. Women access their locker room by a staircase located behind the Juice Bar. Locker rooms are located on the second floor and are not accessible by an elevator. The men's and women's locker room share a small whirlpool room and both have access to a back stairway. The locker rooms are basic and offer two different sizes of lockers.

If a member does not proceed to their respective locker room, the Juice Bar and Pro Shop are on either side of a wide hallway as a member progresses to the lounge area. The lounge opens up to a fire place, comfortable seating, and observation area for the tennis courts but offers no views to outdoors or any natural daylight.



Figure 37.2 - Lounge Area

A hallway on the left leads to all of the fitness amenities.

Hours vary between opening between 5AM - 8AM depending on the day and stay open until 8PM-11PM unless it is a Saturday during summer then they close at 5PM. The **hours are flexible** enough to allow early risers and night owls to get their workout in for the day. Business professionals can get a cardio workout in before work and arrange a tennis match after work.

Hazel Glen Child and Family Centre Children

Location: 65 Eminence Boulevard
Doreen VIC 3754, Australia
Typology: Community Center
Size: 15,930 SF
Built: 2015

“creation of well-functioning, spirited and purposeful spaces”



Figure 38.1 - Hazel Glen Child and Family Centre Exterior

The centre uses vibrant color with glazed bricks to present an active atmosphere. Other materials include concrete, wood, and steel. The program includes four childcare rooms including two for kindergarten, health consulting suites, various sized community rooms, and a flexible central gathering space. The building responds to its site by mimicking the Plenty River with its curved walls and roof line acknowledges the distant Kinglake Ranges.

The purpose of the centre was to deliver community facilities that provide an inclusive and healthy environment for all users. The client asked for a “welcoming, vibrant and accessible integrated early learning centre, providing services, activities, and opportunities for social connections.”

To suit the building for colder climates, a gas-fired hydronic in-slab heating system, thermal mass, and evaporative cooling systems were installed within the building. An underground tank and small above ground tank collect rainwater for use within the building and for kids to play. Shading of glazing maintains comfortable temperatures and daylight levels.



Figure 39.1 - Layered Floor Plan

The floor plan is arranged in groups of different uses. The maternal child health consulting services are located to the Northwest, the childcare rooms are linear across the North of the building. An organic shaped corridor widens to a flexible open community space. A majority of the program is located outdoor with many playground areas for children.

The section shows the different roof pitches and height clearances throughout the spaces.



Figure 39.2 - Section



Figure 39.3 - Outside Seating Figure 39.4 - Gathering Area



Figure 39.5 - Childcare Room

The community space is open to two story height. The interior windows allow the classrooms located on the second floor to gain indirect daylight from the atrium. The interior photograph [Figure 39.5] showcases the odd shaped interior clerestory shaped by the inspiration of the different roof pitches.

Casa Grand & Casa City Clubhouses Private

Location: Bangkloy-Sai Noi Road
Casa Grand & Casa City, Thailand
Typology: Recreation Center
Size: 10,764 SF
Built: 2015



Figure 40.1 - Casa Grand & Casa City Clubhouse Exterior

This center attempts to unite two adjacent communities by incorporating the two clubhouses on the same site but the clubhouse remains private and shared among one's own community. Each community has its own guard gate at the central point of the curve. The curve is created of two unconnected wings, each programmed to serve the specific community.

The roof is composed of two layers giving the impression that the upper roof layer is floating. The secondary roof structure and slanted vertical fins located on the East and West act as a sun shading device. The vertical fins create a dynamic facade and various shadows across the facility's floor.



Figure 40.2 - Secondary Structure Shading Device



Figure 41.1 - Ground Floor Plan

The overall design is **light and grand**. The design focuses natural daylight throughout all spaces. The atmosphere is **conductive to relaxation and energetic to promote exercising and socializing among the community**.

The program has duplicates of most of the spaces including: exercise rooms, restrooms, swimming pool, office space, reception, and entries. The bigger clubhouse representing Casa Grand has a bar area and locker room area added to the program as well as overall larger spaces to support more people.



Figure 41.2 - Atrium



Figure 41.3 - Outdoor Pool Figure 41.4 - Outdoor Area

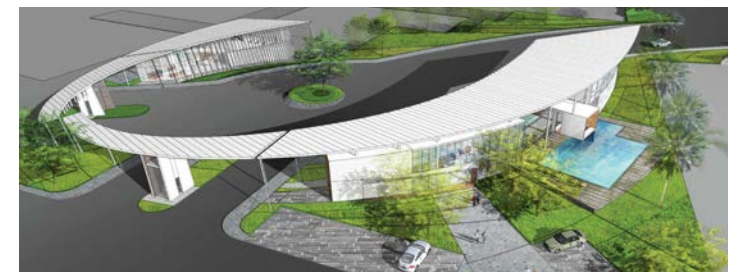


Figure 41.5 - Aerial

Major Project Elements

The spaces of this project are divided into two buildings: existing historic rehabilitation and new construction. The spaces are divided further under specific typologies.

Overall

- Parking
 - currently all parking is on-street
 - create a parking lot for Irvin
- Outdoor Spaces
 - existing building has porches, it is important to restore these porches and add more outdoor community spaces to promote spending time outdoors

Existing: Irvin Hotel

- Hospitality
 - Lobby
 - restore the lobby to its historic presence
 - Historic hotel rooms
 - restore majority of first level rooms to historic presence of individual rooms, some wet and some dry where guests share a public bathroom
- Bathrooms
 - Men's and Women's bathroom

- Restaurant
 - historic location in day lit basement
- Banquet Room
 - formal space for wedding receptions, graduation parties, and other events
 - access to Kitchen without having to go through the dining room
- Kitchen
 - separate access to dining room and banquet room w/ possible historic access to storage spaces
- Staff Areas
 - laundry facilities & linen storage
 - staff break room
- Public Restrooms
 - near the restaurant and banquet room
- Residential
 - Apartments
 - efficiency, 1, or 2 bedrooms
 - full kitchen/dining
 - living spaces
 - 1 or 2 bathrooms
 - closets/storage
 - Laundry facilities
 - shared laundry room

- Independent Living
 - Apartment style: efficiency, 1, or 2 bedroom
 - efficiency kitchenette
 - ADA bathroom
 - ample closets/storage space
 - living spaces
 - Community spaces
 - TV Room to share with neighbors
 - Community kitchen and dining space
 - Activity Room for card playing or etc.
 - Laundry facilities
 - Owner's Apartment/Overnight Hotel Clerk
 - kitchen/dining
 - 1 or 2 bedrooms
 - 1 or 2 bathrooms
 - living spaces
 - Nurse Living Space
 - 2 or 3 bedrooms
 - full kitchen/dining
 - living spaces
 - 1 or 2 bathrooms
 - office
- New Construction: Center for Social Interaction**
- Gym
 - full-sized basketball court to accompany basketball, volleyball, and to serve as any other venue needed by the community
 - Therapeutic Pool
 - healing properties for all community members, especially serving the independent living residents located at the Irvin Hotel
 - Swimming Pool
 - swim lessons, public use, indoor/outdoor
 - Hot Tub
 - outdoor with patio and grill
 - Sauna
 - Locker Rooms
 - near pool area and gym area
 - Men's, Women's, and Family
 - showers, rentable/lockable lockers, toilets, and lavatories
 - Public Restrooms
 - accessible through common spaces
 - Meeting Rooms
 - Pool Side/Outdoor Access
 - Independent
 - used by anyone who wants a community space to gather
 - divided by partition walls, so different sized rooms can be rented
 - used for low-impact exercise areas
 - Common Spaces
 - Concessions
 - serves the gym and pool areas

Users

This thesis encompasses various users and divides the solution between two buildings: an existing overlooked, abandoned hotel and new construction center for social interaction.

Owners

The owners will be local investors from the community and entrepreneurs who are excited to offer something new to the community of Kenmare. The center for social interaction may be owned by the City of Kenmare but this thesis explores the option of it being privately owned as well.

Guests

The guests will vary throughout the different uses described in this thesis. Many will be residents of the town or surrounding area. Others will be guests that are in town for a wedding reception or visiting family.

Residents

Tenants are a huge part of this project. The apartments on the third floor will be occupied by families or individuals. The second floor will be occupied by elderly individuals or couples who want to be independent but have assistance nearby if needed. One or two nurses will also reside in the building to offer assistance to the ones living on the second floor or one of the apartments will house one nurse and his or her family.

Workers

Workers would include the front desk personnel for the hotel, kitchen staff, bartenders, waiters, nurse, lifeguards, swimming lesson instructors, and workers to serve the many uses this project encompasses. The typical worker will reside within the community of Kenmare. The jobs offered throughout this project can be filled by a high school student, a business manager, or retiree seeking a part-time job.

Site Introduction

This thesis explores design development on two separate sites. One site focuses on **renewal** development of an existing, abandoned building. The other site explores new development to **reawaken** the downtown core and **revive** the community of Kenmare, North Dakota.

Reawaken

The two sites serve as anchors of the downtown core by **occupying a prominent corners** of the downtown area. The first site represents the *history* of Kenmare, and the second will represent the *future* of Kenmare: a community that interacts across generations because of the opportunities created. By locating the second site diagonally across the town square from the first developed site, the proposed site development envelops the entire downtown core.

Renewal

The Irvin Hotel once served as a gateway to the community because of its proximity to the railroad during a time when many traveled by rail. This thesis **renews the sense of a gateway** in two ways: by providing a **residential presence** among the downtown core and by creating an independent living program that **revives the connection** of the aging to the community.

The site's **access to views of the natural beauty surrounding Kenmare** invites residential development. All guests and tenants will revel in the natural beauty of preserved wildlife habitat and the Des Lacs Lake throughout their stay. The existing Irvin Hotel may hold one of the best views available in town. Other members of the community may only be able to view the lake from a street because it is an open corridor not blocked by trees or an elevated view from the hill tops of the city.

The development of the second site revives a **vacant, underutilized** gravel lot. The site is directly accessible from the town square and **currently lacks a valuable meaning** within the downtown core. The services that will be provided within the center for social interaction would be more beneficial to the community when **linked to existing services**. The program proposed **revives the community as a whole** by providing services not currently available in this capacity and promoting intergenerational interaction.

Revive

Site Introduction

Both sites are located within a small, rural town located in northwestern North Dakota. The population averages 1,200 residents. The community offers over seventy businesses allowing one to be capable of sustaining life within the community without frequent trips outside of the community.

The overall site area includes the downtown core of Kenmare, North Dakota. Kenmare has a downtown core revolving around a city block park space which has been reserved since the original plat of the town in 1899. The park hosts many community events throughout the summer including appreciation suppers and the annual rib rally and grill fest. A majority of the retail and service businesses are located around the town square.

Kenmare was named by a Soo Line railroad official's daughter who traveled through the town and was reminded of Kenmare, Ireland from the scenic views of the lake and rolling hills.

Kenmare means "forever more."



Figure 46.1 - Aerial of Kenmare, ND

City: Kenmare
 County: Ward
 State: North Dakota
 Region: Midwest
 Country: United States

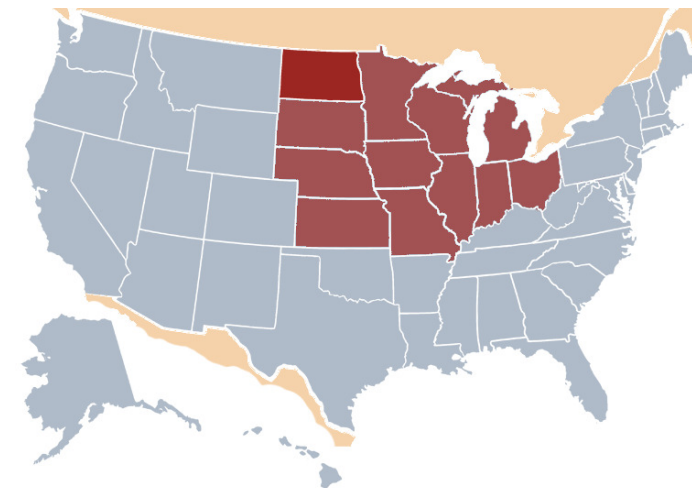


Figure 47.1 - Midwest Region

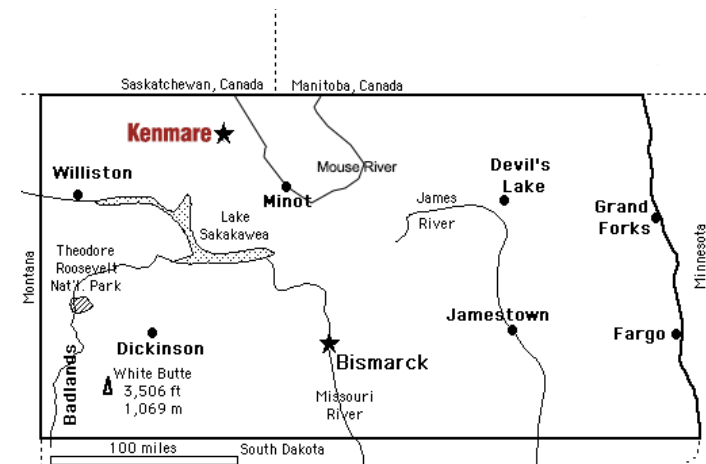


Figure 47.2 - Location of Kenmare within North Dakota

The culture of Midwest is based on a religious heritage and hardy pioneers who settled the land and worked hard to earn a livelihood to pass on to their children and grandchildren. Many of the immigrants who settled the Midwest region derive from Scandinavian and Northern Europe heritage. The landforms of the region varies from the flat Great Plains to rolling hills and rising mountains and then descends to great valleys.

North Dakota was admitted to statehood on November 2, 1889 as the 39th state of the United States of America. The area of the state is allocated as 68,994 square miles of land and 1,710 square miles of water and ranks number 19 within size of area. North Dakota is ranked 48 out of 50 for population as of 2013 with a population of 723,393. The economy is widely based on agriculture but also features food processing, machinery, mining, and tourism sectors. Scandinavian and German heritage remains strong throughout the state.

"The people here are among the most self-sufficient and friendly in America."¹

¹(iExplore, 2015, para. 8)

The first site is currently home to the existing Irvin Hotel building, the candidate for the residential portion of this thesis exploration. The site is conveniently located behind a majority of the commercial development to encourage community involvement and quick access to common needs and entertainment but far enough away to be secluded from the busiest streets in town.

The Irvin Hotel was built in 1915 and greeted weary travelers who disembarked the Soo Line Railroad at the Kenmare train depot. The building has sat unused for over twenty-five years. The building serves as a distinguished character in the formation of present day Kenmare.



Figure 48.1 - North facades



Figure 48.2 - North and East facades



Figure 48.3 - South and East facades

This site is perfect to explore renewal because it is currently viewed as an abandoned and worthless site which can be redeemed as a historic and valuable asset within the community.



Figure 49.2 - Looking Northwest



Figure 49.3 - Looking Northeast



Figure 49.1 - Existing Irvin Hotel Aerial Site



Figure 49.4 - Looking East



Figure 49.5 - Looking Southeast

This second site helps one explore a successful intergenerational center for social interaction for use by all community members and guests of Kenmare.

The site is located on a prominent corner of the downtown core. The site's current state is a vacant gravel lot which allows access to the recycling collection center for a semi and trailer to pick up the materials to be transferred to a different recycling center for further processing. To the West of this vacant lot is the Kenmare Senior Citizen's Center and elderly subsidized apartments. To the South and East, the town square prominently anchors the central core.

The center for social interaction encourages intergenerational and community interaction and should be located centrally among other community services and near existing infrastructure. This site allows the center for social interaction to become a link to existing services. The existing fitness centers, both located within equal distance, compliment the center's proposed program by providing exercise equipment. The site also links the existing senior housing complex to the west with the community and proposed Irvin Hotel renovation.



Figure 50.1 - Looking Northwest onto site



Figure 50.2 - Looking East onto site



Figure 51.1 - Looking North, West of site



Figure 51.2 - Looking West onto Site



Figure 51.3 - Looking South



Figure 51.4 - Looking East

This site presents itself as a prime candidate to explore revival of the community through development because it is an underused prominent corner lot located diagonally across the town square offering connections to existing services.



Figure 51.5 - Aerial Site: Center for Social Interaction

Landmarks of Kenmare



Figure 52.1 - The Danish Mill located in center of Town Square



Figure 53.1 - Des Lacs Lake with Kenmare in background



Figure 53.2 - Goose Capital of North Dakota



Figure 53.3 - Kenmare High School Rock Tradition



Figure 53.4 - Kenmare Theatre Marquee

The Project Emphasis

This thesis emphasizes uniting a community through different opportunities to participate in intergenerational interaction. The elderly housing is placed in a non-typical situation among many different users to encourage the elderly to remain connected to their beloved community.

The main emphasis focuses on **providing options for interaction throughout all seasons and for all ages.**

A secondary emphasis is to **preserve a piece of Kenmare's history** and breathe new life into an overlooked and abandoned building that can be tied to the roots of many families still living in Kenmare.

A tertiary emphasis is to **revive the downtown presence of Kenmare.**

Further investigation will be focused towards analyzing community needs and rural town living, preserving historic character of an existing building and compliance of ADA standards, historic analysis of the Irvin Hotel, mixed-use development, designing for senior living, and how to facilitate intergenerational relations among the community's residents.

Goals of the Thesis Exploration

The overall goal is to **give back to a community** that shaped who I am and show the residents of Kenmare their town is **worth investing** in even if it is a small town no one has heard of.

One academic goal is to prepare a thorough thesis exploration analyzing all the issues I have outlined. A second academic goal is to leave behind a great example for future Master students of the Architecture Department to look upon for guidance.

One professional goal is to learn historic preservation and adaptive reuse principles that can be applied to projects I will encounter within my career. Another professional goal is to complete this thesis thoroughly as if it were a project in reality.

One personal goal is to complete this thesis in a feasible way that could be implemented in the community of Kenmare one day. Another personal goal is to develop an inclusive thesis I am proud to present in May.

Goals of the Thesis Project

With implementation of the two proposed buildings, one goal is to *promote interaction among generations*. Academically, I will research different methods that have been implemented in the past to foster these relations. Professionally, I think it is important to consider these aspects throughout any project. One should ensure nothing they are designing is segregating generations. Personally, I would like to see more effort put towards having the elderly continually engaging the community and younger generations. It saddens me to see the elderly separated and “locked” away and forgotten as their memories fade faster than if they were nurtured in a “normal” environment.

Another goal is to *provide services that are not readily available within the rural community already*. Academically and professionally this will be accomplished by researching the services already available within the community of Kenmare and assessing the needs of current and future residents. Personally, I will reach this goal by spending time within the community and discussing with residents of Kenmare.

This thesis depends on *successful historic preservation and adaptive rehabilitation of the Irvin Hotel*. Academically, I will look at case studies of other rehabilitation projects of older buildings. Professionally, I will use lessons I learned throughout my internship and past experience with renovation projects. Personally, I will challenge myself to explore many adaptation solutions to honor the Irvin Hotel with the respect it deserves.

A Plan for Proceeding

This thesis will be supported by thorough analyzation of case studies, thorough research, and investigation into the requirements for each typology and topics relating to overall project. After thoroughly analyzing the research, a design solution to the initial thesis premise will be provided.

Research Direction

The theoretical premise will be researched by identifying key aspects and finding supporting articles and case studies to evaluate different theories. The project typology will be researched through case studies including on-site observations and gathering information from online and print sources. Historical context will be analyzed by researching the history of the town of Kenmare through local resources, i.e. *The Kenmare News*, and NDSU archive collection along with online and print sources. Site analysis will be conducted by on-site observations, analyzing the topography, and through photography. Programmatic requirements will be addressed with the knowledge gained from thorough research and the community's needs.

Design Methodology

This thesis will use a mixed method to analyze possible solutions and to arrive at the final solution for this design thesis. The mixed method will involve graphic and digital analysis through sketching and 3D modeling as well as descriptive on-site observations through hand sketches, writing, and photography. The mixed method will also consider advisement and opinions on specific topics looked at through this thesis by acquaintances along the way.

Documentation of the Design Process

This thesis book serves as a direct evidence of the research undergone and how initial ideas have transformed into a design solution. Throughout the design process, I will electronically archive process drawings and drawings representing the transformation from initial to final not only the final documentation. Any process drawings contributing to milestones within the project will be included within this book in the “Design” portion.

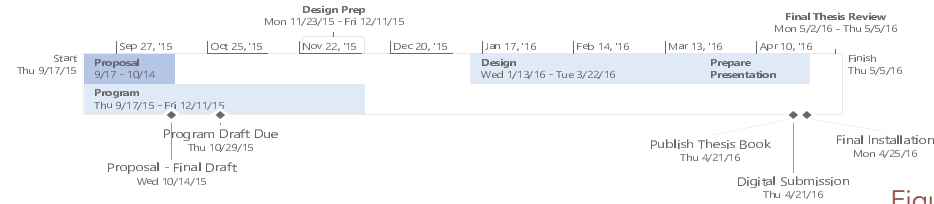


Figure 58.1 - Timeline

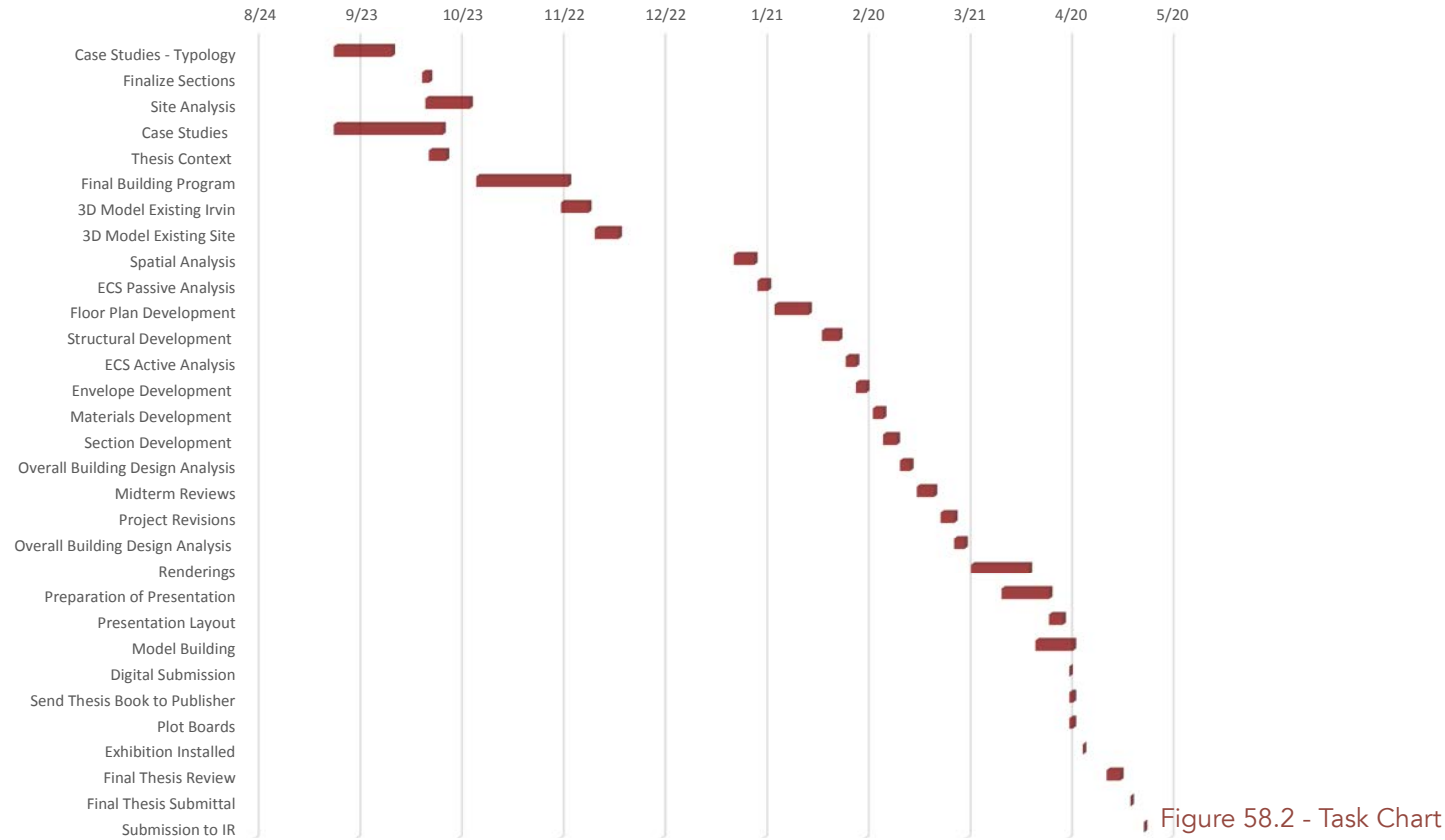


Figure 58.2 - Task Chart

Phase	Task	Start Date	Work Days	Completion Date	
Proposal	Case Studies - Typology	9/17	17	10/9	
	Finalize Sections	10/13	2	10/14	
Program	Site Analysis	10/14	13	10/30	
	Case Studies	9/17	32	10/30	
	Thesis Context	10/15	5	10/21	
	Final Building Program	10/29	27	12/4	
Design	3D Model Existing Irvin	11/23	8	12/2	
	3D Model Existing Site	12/3	7	12/11	
	Spatial Analysis	1/13	6	1/20	
	ECS Passive Analysis	1/20	3	1/22	
	Floor Plan Development	1/25	10	2/5	
	Structural Development	2/8	5	2/12	
	ECS Active Analysis	2/15	3	2/17	
	Envelope Development	2/18	3	2/22	
	Materials Development	2/23	3	2/25	
	Section Development	2/26	4	3/2	
	Overall Building Design Analysis	3/2	3	3/4	
	Midterm Reviews	3/7	5	3/11	
	Project Revisions	3/14	4	3/17	
	Overall Building Design Analysis	3/18	3	3/22	
Prepare	Renderings	3/23	17	4/14	
	Presentation	Preparation of Presentation	4/1	14	4/20
		Presentation Layout	4/15	4	4/20
Model Building		4/11	11	4/25	
Digital Submission		4/21	0	4/21	
Presentation	Send Thesis Book to Publisher	4/21	1	4/21	
	Plot Boards	4/21	1	4/21	
	Exhibition Installed	4/25	0	4/25	
	Final Thesis Review	5/2	4	5/5	
	Final Thesis Submittal	5/9	0	5/9	
	Submission to IR	5/13	0	5/13	

Figure 59.1 - Proposed Schedule

Kenmare, North Dakota -102.098, 48.6691

“A small, quiet peaceful town, nestled on the shores of the beautiful Des Lacs Lake in the heart of a rich prairie country, is a description of the city of Kenmare, in northwest North Dakota. Rolling hills and colorful bluffs surrounding the valley add to this picture of natural beauty. Small but well-cultivated farmland and green, rolling pastures dotted with healthy cattle, gives this settlement a touch of “God-given” serenity.”¹

Kenmare has a rich history and many dedicated pioneers who contributed to the birth of the town. The first settlers originated from Scandinavian heritage along with a few Danes, Swedes, and Germans. Before the town was incorporated in December 1901, Kenmare was once referred to as Lignite after the coal mines and Tolley after E.C. Tolley, one of the first prospectors. Lignite and Tolley eventually became names of neighboring towns. Even though the town was not incorporated until 1901, Kenmare recognizes 1897 as the founding year.

The founders are notable for reserving a city block within the middle of downtown for public gatherings in 1899 when the town was originally platted. The community has preserved this city block to present day. The city park, or town

square, is a remarkable green space filled with tall, beautiful trees offering shade and serves as an outdoor venue for community events.

The town is surrounded by a beautiful refuge containing 19,544 acres. The refuge serves as a temporary home for over 250 species of birds and 400,000 migrating geese. The Des Lacs National Wildlife Refuge Backway offers excellent views of rolling hills and wooded draws of the Des Lacs Valley. One can see the old brickyard from Kenmare Brick Company along the drive.

The city acknowledges the Des Lacs Lake and Wildlife Refuge, CPR Railway, and the U.S. Route 52 by platting non-orthogonal city blocks that respond to the natural and manmade boundaries. Almost every city block is sliced

¹(Downs, 2014, para. 1)

N-S by an alleyway. Within city limits, the City of Kenmare establishes a hierarchy of residential neighborhoods with business located on or near three major streets that pierce through the town.

The most recognized landmark of Kenmare is the Danish Mill which was relocated to Kenmare in 1959 from Christian C. Jensen’s homestead located north of Kenmare. Christian C. Jensen built the Danish Mill in 1902 for area farmers to mill their own grain into flour. In 1961, the restoration of the Danish Mill was completed and in 1965 it was given a new home in the center of town square.

Two main thoroughfares pierce through town, Central Avenue and Division Street. Both serve as entry points into town, one at the northeast and one at the southeast edge of town. The two streets bring one directly to the town square where the two roads intersect.

Central Avenue serves as the Northeast entry into town and creates the main business corridor. The road also offers a beautiful view of the Des Lacs Lake from the northern most four-way stop. The road ends just past the front entry of the Irvin Hotel at the railroad tracks. A left will lead to a

gravel scenic backway that follows the Des Lacs Lake, and a right would lead you past the south facade of the Irvin Hotel and back to one of the prominent corners of the downtown core.

Division Street creates the first entry for Northbound travelers located at the Southeast entry to town. The road descends toward the town square. Sixth Street or ND County Road 2 serves as a way to cut across Kenmare East to West. A mix of residential, industry, and commercial borders the street. A new sidewalk project currently under way will create a safe route for children to walk between the two schools and serve community members. The daily vehicular traffic of Kenmare, according to NDDOT, ranges from 2,250 passing by on US-52 to 1,900 using the County Road 2 to 1,065 using Division Street to 500 traveling along Central Avenue.

Kenmare, North Dakota Context

Historical

North Dakota was home to many Indian tribes before settlers arrived. A few of the tribes were nomadic focusing on hunting while a few were permanent settlers focused on trading. Presently, tribes have moved out of Kenmare and associate with a specific town within North Dakota. North Dakota's main industry is agriculture coupled with abundant coal and oil reserves.

Kenmare has a unique and colorful history. The downtown area has been home to hundreds of



Figure 62.1 - Town Square c.1900

businesses over the past years. The original plat only allotted twenty-five feet for street-facing facades. Figure 62.1 shows the town square in its initial phases with various business located on the north side of the square. None of those buildings still stand today. Figure 63.1 shows the grain elevators once located near the depot, south of the Irvin Hotel. None of the elevators still stand today.

Kenmare has worn many hats since its early days. Kenmare's first known settler, Mr. Cartwright, opened the first mine in 1880. Kenmare once served as the place for a Texas cattle company to load Longhorns for market. In 1894, 125,000 head shipped out of Kenmare after being herded



Figure 62.2 - South side of Town Square

across the plains of Montana. The rolling prairie was great for grazing and the coulees located southwest of Kenmare were frequently used as natural corrals. Canadians drove their cattle across the border during times of drought to settle within the green abundant plains. Pioneers had to travel to Minot for provisions. The trip by train took two days. Now, some residents commute to Minot daily for work or vice versa. The severe winters played a huge role in whether settlers would stay or move on.

The first brick building in town was located on the west side of the square after a fire burned six businesses to the ground. This brick building no longer stands because of a new development



Figure 63.1 - Depot and Elevators, South of Irvin

that replaced the west side of the square in 2013. Only a few of the original buildings from the 1900s still exist. The Opera house located on the northeast corner of downtown once served as a Bertelson Department Store with the performance venue located on the second floor. The building until recently served as apartments. The Irvin Hotel built in 1915 still stands tall after being abandoned for twenty-five years.

The town established its first post office in 1897. The Kenmare News was established in March 1899.



Figure 63.2 - Looking North upon Central Ave from Depot

Social

The overall social context of the Midwest region is quiet and reserved. North Dakota's attitudes reflect conservative values. Kenmare is not an exception.

North Dakota has experienced many population booms. The first great settlement boom occurred between the years of 1879 and 1886 when 100,000 settlers, mainly Scandinavian immigrants settled 160-acre homesteads. A second population boom occurred during the establishment of cross-country railroads. The state's population increased with the ease of travel from 190,983 to 646,872 during 1905 to 1920. Approximately 1,200 carloads of settlers arrived by the Soo Line Rail in Kenmare.

Other influential population booms have been because of oil discovery. The latest oil boom started in 2007 but drastically changed the ND scene around 2010. Kenmare did not experience the population overflow like surrounding communities of Stanley, Williston, Crosby, and Minot. The residents did, however, feel the effects of increased prices, traffic, development, and crime along with the economic growth and

stability of the state throughout the recession of 2008.

Most of the residents distinguish themselves as Christians. The Kenmare area has nine churches accommodating Baptists, Evangelical, Methodists, Lutherans, and Catholics. Even in the early days, Kenmare settlers preferred four denominations for worship. Within the years of 1895-1900, Catholic, Lutheran, Methodist, and Baptist churches were established.

Many of Kenmare's residents come from a farming background. If their family does not currently farm, then grandparents or great grandparents once farmed the prairie. The landscape is dotted with old farm buildings and grain silos. Many partake in the hunting tradition. A few of the family farms also run cattle ranches. It has been said that there are more cattle in the state of North Dakota than people.

The pioneer heritage of North Dakota has been preserved and put on display in many communities throughout the state. These museums remind North Dakotans of the hardships and hard work their ancestors endured settling the prairie.

Cultural

North Dakota has an interesting mix of history, culture, and modern influences. A majority of the population is Native Americans coupled with a strong Scandinavian influence (38%), mostly Norwegian (33%). North Dakota is also home to many ethnic Germans from Russia. North Dakota even has an area referred to as the German-Russian Triangle located in the south-central region of the state.

Kenmare's residents have a strong hold on their heritage and cultural background. Many still associate with festivals celebrating their cultural heritage like the Norsk Hostfest held in Minot every year. Many Scandinavians come from native home countries to celebrate their heritage with families who immigrated to America long ago. Many families also express their heritage by cooking or baking specific heritage foods. Kenmare has many Scandinavian residents but also a few Germans. I remember when I was younger many of my classmates and I talked about our heritage background. Our grandparents and parents encouraged us to have pride in our national descent and taught us about our ancestral roots.

The town, even though it is small, has two museums that call Kenmare home: The Lake County Historical Museum and V & R Toy Museum. The Lake County Historical Museum commonly known as Pioneer Village has 23 buildings located on the northeast edge of the town. The museum has three larger buildings housing a variety of antiques on display including antique tractors and equipment. Another one of the buildings is an authentic one room school house moved to the "village" from nearby. Other buildings are created to represent storefronts of past businesses in Kenmare including a newspaper office, dress shop, butcher, and many more.

The other museum is privately owned, V & R Toy Museum. The museum is open once annually for a Toy Show but otherwise open all year by appointment. The museum boasts the collection of Vern Eymann with a large selection of farm and construction toys, trucks, train set, and farm scene display. The museum is now operated by his wife Rose.

North Dakota has a modest culture balanced with strong sense of individualism and self-determined independence.

Kenmare, North Dakota The Facts

Population: 1,200
 Primary Industries: Farming, Energy
 Rainfall: 18 inches
 Snowfall: 39 inches
 Winter Temperature: 6° Fahrenheit
 Summer Temperature: 70° Fahrenheit
 Temperature Range: -40° F - 100° F
 Humidity: 60%
 Climate Zone: 7
 Plant Hardiness Zone: 3-4
 Wind Speed: 10 mph

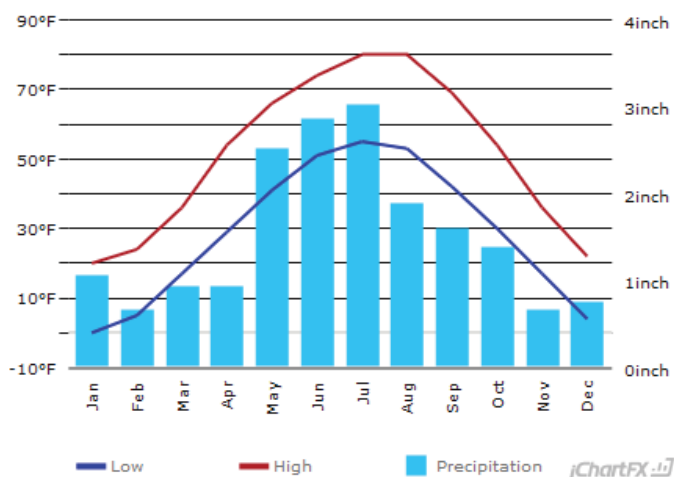


Figure 66.1 - Climograph

Climate

Kenmare is located in the Northwest region of the state of North Dakota. The area experiences all four seasons, if anything, the city experiences a shorter fall with an extended winter. The coldest time of the year is mid-January through February. The summer heat does not linger for long.

Kenmare commonly experiences strong winds up to 70 mph. The windchill increases the intensity of a zero degree day to feel as if it were 30 below. Strong summer winds are also common.

The center for social interaction proposed throughout this thesis will provide opportunities for residents year round but focuses on providing options throughout the colder months - November through April.

Population

According to the 2010 Census, Kenmare's population was 1,096 living within city limits. Kenmare's school district serves students from Tolley, Donnybrook, some from Bowbells, and many other farm families. As a result, the population is estimated to be more because

of the various people the town serves even if their address is not listed as Kenmare. Kenmare is recognized as the 49th largest city of North Dakota out of 401.

The median age is estimated to be 46.7 years but this is only increasing as time passes. The census recorded 188 children aged between 5 and 19. The Kenmare School District reports a student enrollment for academic year 2015-2016 of 316 throughout grades K-12. The number of children is over the census count because of surrounding small towns and farmsteads served by the community.

The population aged 60 and above in 2010 consisted of 333 adults accounting for twenty-five percent of the town's overall population. The town's population is slightly diversified, but the majority (ninety-five percent) is considered "white" usually of German or Scandinavian descent.

The average house is worth \$85,200. The household breakdown recorded in 2010 counted 480 households in total. 281 of these households were listed as family households. 166 indicated a resident over the age of 65. At the time of the

census, there were 558 dwelling units available and 78 were vacant. The survey also discloses 50 individuals were considered to be living in group quarters. I believe, this considers the residents who were living in the assisted living facility which has since closed its doors.

The average household income as of 2013 provided by the American Community Survey is estimated to be \$65,673 with the average family income stated as \$80,946.

The population of Kenmare has many professionals that contribute to the business sector of the town. Kenmare has a wide array of services available making it a self-sustained town for the majority of needs. Kenmare has a clinic and hospital along with private practicing optometrist and dentist. The town also has various professionals including certified public accountants and lawyers.

The town of Kenmare is well educated. An estimated eighty-five percent of the residents have attained a high school degree along with at least twenty-nine percent of residents holding a bachelor's degree or higher.

Site Characteristics

Soil composition resembles glacial soils made primarily of Barnes loam common with minimal to twenty-five percent slopes. Barnes loam is somewhat limited to structural bearing capacity. The area tends to have 115 frost free days. The topography gently slopes upward from the coulee that runs through town draining into the Des Lacs Lake. The downtown area slopes downward from north to south and from west to east. The water table is approximately more than sixty inches below grade. Surface stormwater run-off drains to the south and west eventually draining into the Des Lacs Lake.

Any development may be built up to the sidewalk or property line because both sites proposed for this thesis are zoned as commercial and have no setbacks or easements. The utilities: Montana-Dakota-Utilities and Reservation Telephone Cooperative have lines buried under sidewalks. The city's sanitary sewer and water main lines are located under the street. For Center for Social Interaction site the sanitary sewer line is ten inches and the water main line is eight inches. For the Irvin Hotel site, the sanitary sewer line is twelve inches with a water main line of six inches.



Figure 68.1 - The Intersection



Figure 69.1 - Town Square



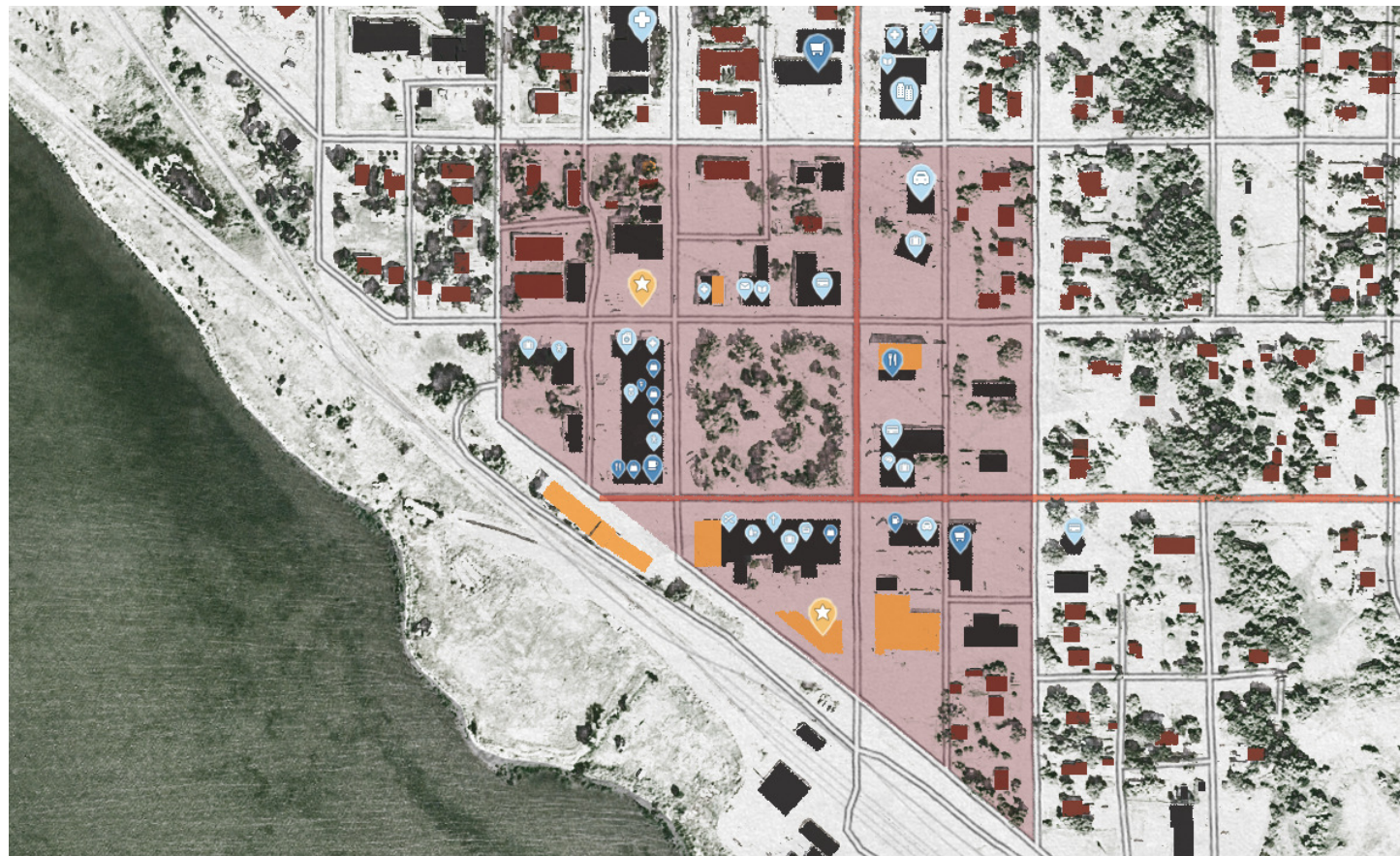
Figure 69.2 - Town Square



Figure 69.3 - Site for Center for Social Interaction



Figure 69.4 - Irvin Hotel



Vacant Residential Commercial Major Streets Downtown Area

Located Downtown
 Located along Central Avenue
 Located within 2 blocks of Central Avenue

- Gartner's Jack & Jill
Kenmare Super Valu
- Ying Bin Chinese Restaurant
Gathering Grounds
M&K Pizza Hub
Dave's Place
Kenmare One Stop Burger Shop
- White Buffalo Soda Fountain
Kenmare One Stop Burger Shop
- Gathering Grounds
- Gathering Grounds
Kenmare Floral
Kenmare Drug
Kenmare One Stop
Hansen's Hardware
Northern Appliances, LLC
Garbel's Furniture
- Chiropractic Associates
Dr. Colby, O.D. Optometry Clinic
First District Health Unit
Kenmare Clinic
Kenmare Community Hospital
- Kenmare Dental Clinic
- Memorial Hall - City of Kenmare
- Reservation Telephone Company
- Central Automotive
Freeman Oil
Farmers Union Oil
- Freeman Oil
Farmers Union Oil - Cenex
- The Kenmare Theatre
- Beer Bob's
City Limits Bar & Bottleshop
Dave's Place
- Spin City Laundry
- Faith Baptist Church
Church of Nazarene
Nazareth Lutheran Church
St. Agnes Catholic Church
United Methodist Church
- KCH - Wellness & Fitness Center
Boom Fitness
- Kenmare Drug
- Library
The Kenmare News
- US Postal Service
- BNC National Bank
Town & Country Credit Union
State Bank & Trust of Kenmare
- Janell Art Studio
- Creative Illusionz
Shear Creations
Beauty Nook
Wild Styles Salon & Spa
- Farmers Union Insurance Co.
First Financial Services
Johnson Tax Service
Jorgenson Insurance Agency, Inc.
Jan A. Kostad, P.C.
Steinberger, John Jr., Attorney
Thompson-Larson Funeral Home

Other Key Services:
 Recycling Center
 Kenmare Senior Citizens Center
 Kenmare Country Club
 Meals on Wheels
 Modern Woodworks
 Outdoor Swimming Pool

Site Analysis Irvin Hotel

The site of the Irvin Hotel at first glance shows signs of neglect and abandonment. Most passerbys do not give a second thought about the building. Many only notice the weeds growing from the window sills and the broken windows backed with plywood. Many believe the building has surpassed its life span. The curiosity, however, still lies deep within many who have always wondered what lies behind the brick bearing walls of the Irvin Hotel.

Once I expressed interest in the building to my family, most of their eyes glistened with excitement at the chance to see behind the locked doors. I was able to show both of my grandparents the hotel in early August. Although they were excited to see the remains of the hotel, both expressed comments similar to the reality would be too much work to be worthwhile. I agree the building in its current state does need an overhaul cleaning, but I see potential within this 100 year old abandoned building. I believe, the detail and care this building was crafted with deserves to be preserved and honored through adaptive rehabilitation.

This site once served as a gateway to the city of Kenmare. Since the site has been abandoned for over twenty-five years, it is *a prime choice for exploration of renewal, reawakened, and revival investment within the community*. The building itself tells a story of construction before advanced technology was available. All bricks were used even if they were deformed or imperfect. The angles where each facade connects with another was not chiseled flush but simply left as a full brick. Bricks were stacked alternately in a sawtooth fashion to create an interesting subtractive detail.



Figure 72.1 - Brick Detail

December 14, 2015

The building form reflects the railroad that cuts across the prairie. The reflection is proper response because the main purpose of the Irvin Hotel was to serve weary travelers who arrived merely feet from the front entry of the Irvin with food and a bed for a low rate. The hotel also served travelers by automobile offering a steam-heated garage, which has since been torn down, for Model T's to park in overnight so they would start on a cold morning.

The site surrounding the built structure is small. The southeast corner has a triangle of cracked concrete once used as a flower bed. The North side hosts a small, private grassy area that would be the perfect getaway from the afternoon sun. The back alleyway is elevated creating an embankment of greenery and making the area feel like an enclosed private space. Both spaces could become great outdoor, landscaped areas. The ground cover planted years ago has become native and adapted to be maintenance free ground cover.

The building shades the site to the North. The South and West walls are parapet walls with the North facade donning rain gutters in many places. The building once had window overhangs

decorating the Southeast and East facade in the early 1940s. These window overhangs have since been removed. No trees are presently planted on site, nor do I think there ever was since there is not a lot of additional ground area.

Parking for the renovated hotel and apartments will be on-street parking along with a newly created parking lot across the street included within the site development area. The site where parking will be placed is an abandoned building and vacant site once home to Ford and Case dealerships. The lot is currently owned by Ward County, whom fenced the entire property.



Figure 73.1 - Irvin Hotel c. 1915

Renewing Rural Small Town Life: Intergenerational Interaction as a Key to Community

The site offers quiet, serenity while bordering one of the least traveled roads and areas of downtown. The train horn may be a slight annoyance throughout the day but the four wythe thick brick walls dampen the sound well.

Even though the brick building is massive, the facades are repetitively punched open with huge spans of glass. The hotel was ahead of its day with the huge single plate glass picture windows located in the lobby and double-hung casement storm windows within each room. The basement was not treated as a mere second thought either. Window wells were created to bring light and patrons down to the basement from the sidewalk. The south and east facades where most of the rooms are located offer the greatest view of Kenmare looking upon the natural beauty of the glacial river valley, Des Lacs Lake, and refuge.

The Irvin Hotel is three stories above ground with a partially exposed full basement just under 25,000 square feet. Presently, the building does not have an accessible entry or elevator satisfying the Americans with Disabilities Act. Different solutions will be analyzed to find an appropriate way to honor the historic character and integrity while meeting accessibility standards.

The existing wooden lobby desk has minimal wear and tear and will remain in place. The lobby remains an open and luxurious seating area. The fire place will remain as a prominent feature of the lobby. Corner porcelain sinks with cast iron brackets are located within the linen closets and offer an authentic and historic detail. A majority of the hotel rooms located on the south side of the double-loaded corridor offered a sink or full bathroom. The rooms on the north were narrower and were considered a "dry" room without a sink.

The electrical, mechanical, and plumbing systems all need to be updated. There is no air conditioning system within the building. Transoms above the doors once served as the ventilation system. No fire sprinkler system is in place. The roof will need to be addressed as well as any moisture problems throughout the rehabilitation process.

All sidewalks and exterior concrete will need to be redone. What once used to serve as the servant quarters will need a new layer of surface concrete and the rooms will be changed into storage, most likely.

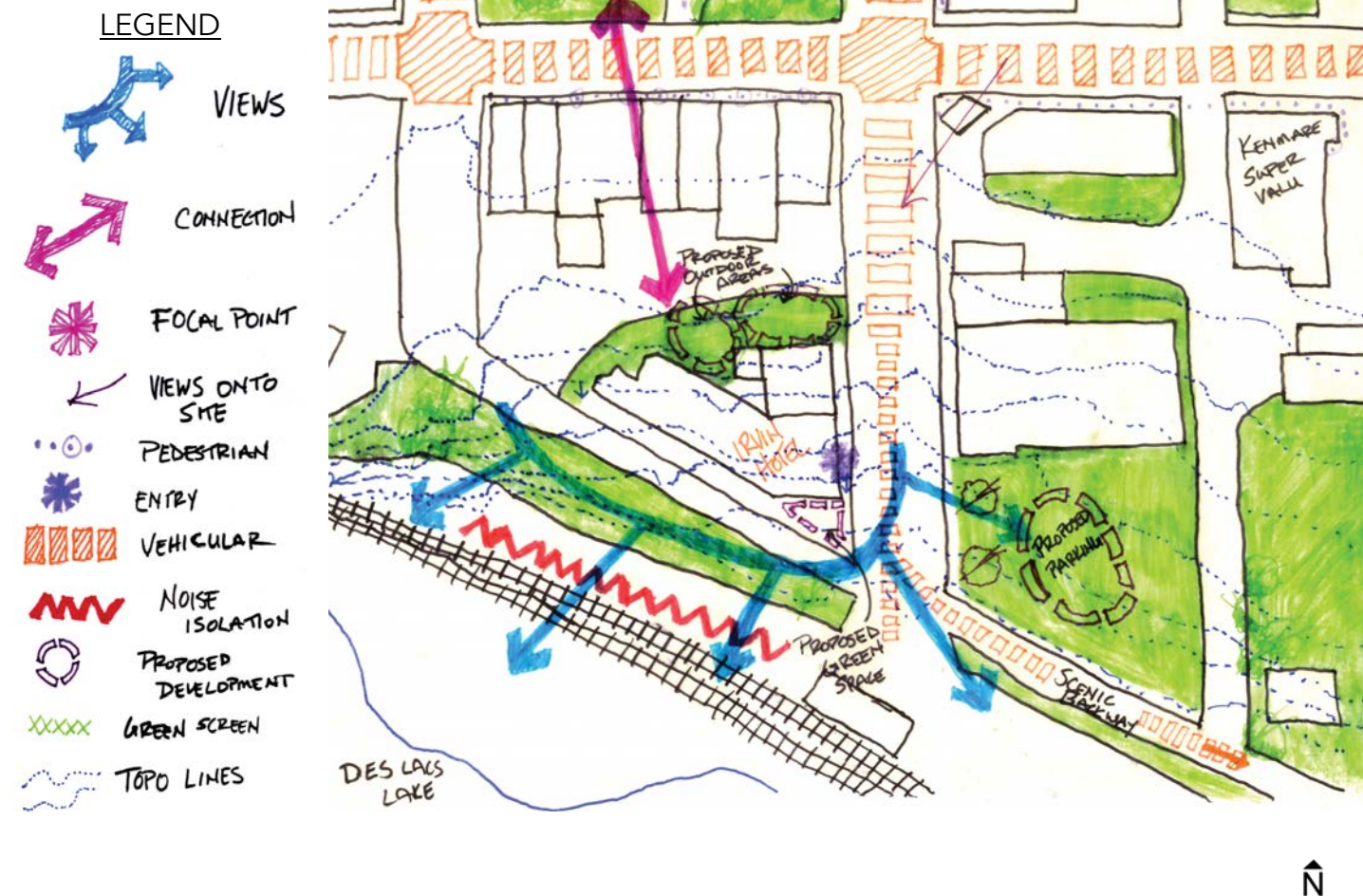


Figure 75.1 - Site Analysis for Irvin Hotel

Irvin Hotel National Register of Historic Places Nomination

Summary

The Irvin Hotel is a three story brick building with a full basement built similar to the style of Commercial Vernacular in 1915. With a significant planned addition built in 1922. The irregular plan parallels the angled road that parallels the angled railroad tracks belonging to the Soo Line Railroad at the time. The property borders the edge of Kenmare, North Dakota, a small town located in Ward County along Highway 52 in the northwest area of the state. The property is considered downtown Kenmare, located on the southeast corner of the block south of the city park, or town square. On the south side of the property presently lies the Canadian-Pacific Railway, Des Lacs Wildlife Refuge, and Des Lacs Lake.

The building adorns one porch to access the residential dwelling, or Owner's Apartment, from the exterior. Three other balconies that were accessible by guests from inside, i.e. no stairs are present on the exterior. The building has various details of craftsmanship throughout the main facades. The property has historic integrity considering the origin of Kenmare, North Dakota.

This property and many surrounding served as the gateway to Kenmare, North Dakota for any visitors or newcomers. The hotel served as an economic development to draw people to town.

Narrative

The Irvin Hotel resembles a commercial vernacular style of building. The building was designed by an architect, Robert T. Frost of Minot, but seems as if it were crafted and constructed by general labors of the area. The building may look like a typical brick building to many passersby but with a closer look one will notice the fine details the craftsmen added with use of brick.

The site the Irvin Hotel has sat upon since its construction slopes to the southeast corner of the property. The soldier course line remains constant throughout the south and east facades but appears to differ because of the sloping property allowing for more of the basement to be exposed on certain facades versus other facades.

The east and south elevations are the most

prominent and detailed expressions of this building. The building is made up of two components: brick and windows placed within punched openings in the brick load-bearing walls. All exterior walls along with one now interior wall which designates where the 1922 addition are four wythe thick brick walls. The owner's apartment and hotel lobby are set a few feet below the main floor of the rooms so the doorways and a few of the windows are partially placed below the soldier course line.

The east elevation contains the entrance to the Irvin Hotel. The entrance is not the most significant grand entry you would expect of a high class downtown hotel. The entry is very basic. The walls are created of wood paneling and fixed panes of glass. The entry brings a guest to a split-level encouraging one to decide to continue to the basement where the café and banquet room were located or up towards the lobby of the hotel. The east elevation has balconies that emerge from the lobby and the owner's apartment. The owner's apartment has one porch that was accessible by a few stairs to the exterior entrance of the owner's apartment. The second balcony was accessible from the second floor of the owner's apartment. The

balcony off of the lobby is accessible by two doors opening from the lobby to the balcony with a big picture window between the two doors. The balcony measures roughly four feet wide by sixteen feet in length. Historic photos place a bench in front of the picture window.

The east elevation has multiple window assemblies punched within this façade. The second and third floors have four aligned punched openings with a row brick sill at the base of each window. A metal plate lintel appears to be at the top of each opening to bear the weight of the bricks above. The first floor



Figure 77.1 - Irvin Hotel East Facade

lobby space reflected on the exterior has one single window to the south which is centered with the two above, but has a smaller width. To the right of that window is the eight foot picture window with a door on both sides. The assembly is finished off with a three panel transom above the doors and picture window. Below the hotel portion is a window in line with the three above and two eight foot picture windows allowing natural daylight into the dining area that once inhabited the basement. The facade expresses the roof line with a single header row of brick before the parapet. The parapet has a single header row of brick along the jamb of the top row of the windows. The band is separated from the parapet detailing by ten rows of brick. Two rows of brick corbel out as a header row caps off the detail. The parapet line is angled and exaggerated by a stone lintel cap roughly six inches thick.

The owner's apartment east façade resembles the façade of the hotel, but shows the different treatment of a three-story and two-story structure. The two story portion is capped by one row of brick that corbels out. Further up the façade are seven rows of brick that meet a three row corbel of brick. The punched window

openings are treated the same as other typical assemblies. The spacing and sizes differ a bit. The second floor balcony is accessible with by a wooden door with a pane of glass within along with a transom window above. The transom above matches the header of the window on either side. On the first floor a big picture window is placed half above and half below the soldier brick line defining the basement portion of the hotel. A second porch is accessible by a couple of stairs from ground level to entry into the first floor of the owner's apartment. Two punched openings adorned with glass block sit on either side of the doorway. Photos indicate that the glass block may have been original to the building for added privacy since it is a private residence versus the hotel. The absence of a brick sill also indicates that these openings were always filled with glass block or perhaps added later. A photo from the 1950s proves they were installed before that time. Below the owner's apartment is evidence of one window opening within the basement matching the dining room windows.

The south elevation adorns the same detail elements of the east elevation. The row of brick corbeled out denoting the head of all third floor

windows along spaced from the three row corbel detail above and the stone capped parapet wall above. The window assemblies adorning the southeast façade differentiate from the south façade. The first floor of the southeast façade represents windows within the lobby area. There are three punched openings in total, all of a different size and configuration. The one to the right is a skinnier single hung window set on top of the soldier course brick line with two of the same above at each level. The middle window is a wider window that dips below the soldier course line with a transom above divided along the centerline. The window is edged with a brick sill below. To the left is a window sized between the two mentioned above. The window is approximately four feet wide with a transom above. The length matches the wider window to the right.

Above the left most window are two smaller windows matching the right most window approximately two feet wide along the center line of the window below. Four feet to the right of these two windows is a repetition of the assembly mentioned above. The basement has three punched openings below. One is a doorway to the dining area while the other two are windows.

The southeast corner of the site used to be landscaped and a stairway to downstairs served as an entrance to the restaurant directly.

The crisscross brick style mentioned before details the connection of the southeast angled façade with the south façade. The parapet details mentioned are still prominent on the south elevation. These details do, however, cease to exist approximately the spacing of one header before the crisscross, layered bricks denote the corner.



Figure 79.1 - Irvin Hotel West and South Facade

The southern elevation differs from the other two mentioned elevations because it is strictly guest rooms and the basement views from the kitchen and dining area. Thirteen windows aligned one above the other for a total of three rows denote the original hotel rooms. The first two windows on the left denote the end of the hall suite which was by far the largest original hotel room to the building. Below the soldier line is a variety of windows and doors allowing daylight into the concrete spaces known as the servant quarters. To the right is a stairway that leads to the dining area beside a big picture window. The other windows are offset off the ground by about one foot. One window differs from the rest because it is taller and extends to the ground. Two storm shelter entrances adorn the left side of the building which are original to the 1922 addition.

The other facades are typical brick facades with punched openings. The west façade at the end of the building represents the approximately eight foot wide bathrooms located within the suites. The multiple angles of the 1922 addition also accompany an iron fire escape that allows guests of all rooms along with a private exit or entrance for anyone staying within the suite. The iron fire escape also allows one to gain



Figure 80.1 - Irvin Hotel East and South Facade

roof access. On the north façade is a change in brick color that denotes the 1922 addition from the original 1915 construction. The facades described in great detail, south and east, also had a fascia brick layer of a deep red because the front of the building greeted travelers of the Soo Line Railroad during its prime. The other facades are created of structural brick of varying shades of red not matching the fascia brick of the 1915 addition and a lighter yellow and orange brick for the 1922 addition. The basement is visible in the North at times. The basement is shown as a concrete foundation wall instead of a red fascia brick adorned with a soldier course.

The owner's apartment had a dining room addition by the second owner around 1940. An additional porch was added to gain access to the owner's apartment from back. The two-story north façade of the owner's apartment also contains the fascia brick because the face greets people traveling south from the town square. A building was never blocking this view except for the steam heated garage, original to the hotel that was torn down in late 1990s or early 2000s by the current owners of the property. A porch used to adorn the north façade accessible from the second story. One notices the differing colors between the fascia brick which must have ran out and is topped with lighter orange and red colored bricks to finish the parapet. The brick parapet details wrap around the east façade to the north and the south façade to the west for approximately a foot or two before ending. The north and west facades do adorn different brick details but none about the parapet.

The detail that catches my eye is the way the angles of this building were addressed. The masons layered brick on top of brick weaving the facades together at each corner of the building. This is also seen when the south façade is met with the southeast façade. Within angles pointing

in towards the building the detail shows the absence of brick.



Figure 81.1 - Irvin Hotel North Facades

The North facades are truly treated as the back or alley side. The North facade expresses four different brick colors. The 1922 addition is distinguished between the intersection of red and light orange bricks. The 1950s dining addition adds another dimension of color. The North facade of the owner's apartment has the same fascia brick from the main elevations but is topped with a lighter brick to finish the parapet. The North facade is also where all of the utilities meet the site.

Site Analysis Center for Social Interaction

The second site has a noticeable slope to the South. The site has been vacant for over twenty years. The site was once home to a grocery store ran under one proprietor's family before a second one took over. The second proprietor's son still operates one of two grocery stores in town. After the grocery store was relocated on the block to the northwest, a bakery operated out of the building until the late 1970s. After the bakery closed, the building sat empty only used occasionally for community events, but the building was deteriorating fast. The building was torn down once a group decided to build the Senior Citizen's Center on the lot to the west.

The site has noticeable human intervention because it has been converted from natural prairie grassland to a graveled lot for access to the recycling center. The site currently has no vegetation.

The site expresses openness. The benefit that would be gained from the site being developed to three stories in height or more will lead to fantastic views for the users. The city of Kenmare

overall slopes towards the Des Lacs Lake to the South and West. The third floor and possibly even the second floor will have sight lines over the downtown buildings, residential houses, and treetops nearby leading to views of the beautiful Des Lacs Lake and river valley.

Besides the direct view of the town square which has mature trees and manicured grass. The site itself has no trees or extreme shade cover from surrounding buildings. Immediately to the west is a narrow graveled alleyway with ground cover on both sides.

The new building and views should be screened from the existing Recycling Center directly to the North. The Recycling Center building expresses Art Moderne style to an extent on the street facade. Even though the building is a warehouse, it has unique character that can be appreciated by few. The building should be screened because it is in need of fresh coat of paint and the overhead door faces South, adjacent to the site.

The material palette of the newly constructed Center for Social Interaction should reflect the old and new. The new construction's purpose architecturally is to bridge the past to the future.

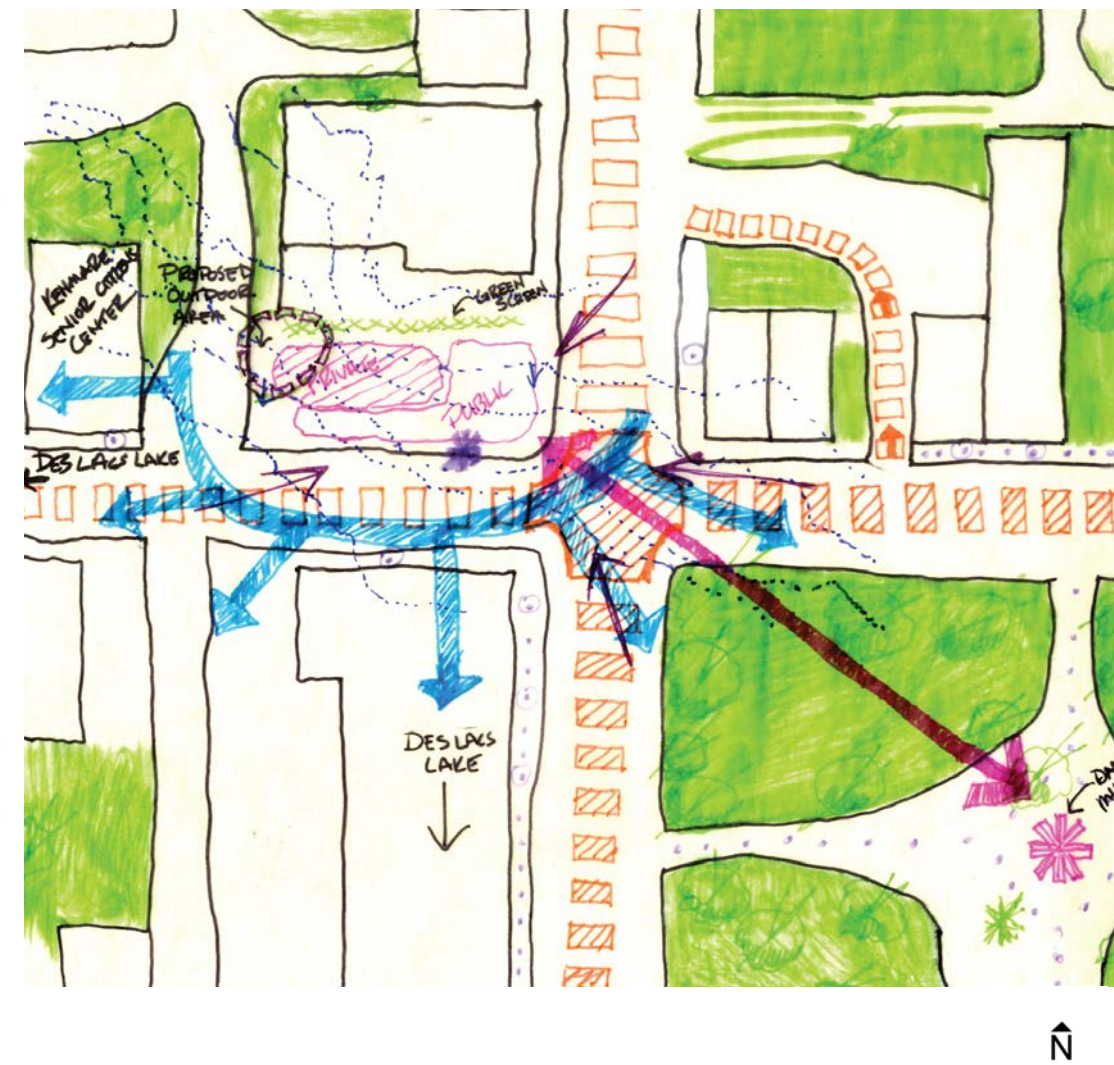


Figure 83.1 - Site Analysis for Center for Social Interaction
Renewing Rural Small Town Life: Intergenerational Interaction as a Key to Community

Structural Analysis Irvin Hotel

The Irvin Hotel is a three-story load-bearing unreinforced masonry structure with half exposed full basement. The load-bearing wall is approximately 16" depth wall. Two columns occupy the dining space and continue to the lobby space. Interior construction is lath and plaster walls and wood-joisted flooring. The north and west basement walls are formed of concrete. The hotel is rumored to be built upon twelve foot foundations. The existing windows are wood-framed. A framed opening will need to be created throughout all of the floors to accompany an elevator for equal access to all floors.

Advantages of load-bearing masonry is the high compressive strength and high fire resistivity. One disadvantage includes poor thermal insulation. To counteract these concerns, the rehabilitation should add insulated stud walls within the interior. Another concern is protecting the brick from water since it is porous in nature.

Live load for private rooms will be 40 PSF and 100 PSF for public spaces.

Cost per SF is estimated to be \$220-250 for both.

Center for Social Interaction

The Center for Social Interaction will most likely be a three-story building with a recessed pool.

Potential structural systems include curtain wall assemblies, conventional steel frame with use of wood floor decking in areas, or concrete. The pool areas will need protective coating over any steel membranes to prevent rusting.

Curtain Wall Assemblies will be considered structural if over 14' tall. Steel studs or sub-frame will be 6" in depth and span to 38' in height. An 8" depth stud span up to 48' in height. Steel framing system will most likely be hollow steel columns, corrugated steel decking with concrete, lightweight steel floor joists, open-web steel joists, and steel beams. Structural wood decking is also a possibility. Spanning distances range from fifteen to sixty feet allowing flexibility for the long-span spaces: gymnasium and swimming pool. Cladding material will most likely be brick or insulated metal panel.

Gymnasium and assembly spaces will be designed for a 100 PSF live load capacity.

Material Analysis Downtown Kenmare, ND



Research of Theoretical Premise

The research of the theoretical premise: how would a rural community be renewed through reawakened development focused on intergenerational interaction, design for senior living, apartment floor plan layout, historic rehabilitation, and rural small town living.

Intergenerational Interaction focuses on the importance of providing opportunities for all ages and all income levels. The research focuses on beneficial interaction for elder and younger generations. Intergenerational interaction is key to a small rural community.

Design for senior living white paper researches the future of senior living. The incoming generation will prefer their privacy and want to remain as active and independent as long as possible. Another level of care has emerged: Independent Living. Independent Living treats the facility as apartments with a nurse on-call to help as needed. One resident may still drive to all of their doctor appointments and morning coffee across town while another may want someone to check his or her blood pressure or make sure that he or she walks daily.

The historic rehabilitation white paper focuses on the concepts of preservation and rehabilitation of older historic buildings. Historic integrity is an important consideration throughout all stages of a renovation project. Another important consideration is making the 100 year old hotel accessible for all.

Rural small town living focuses on the benefits of living in a smaller community. Resources are pulled together for the benefit of the community, not for one specific purpose. The white paper discusses features that are necessary to a community in order for it to be a self-sustaining and viable for the well-being of its residents.

This thesis explores issues and concerns on all of these topics. The Center for Social Interaction is designed to unite all members of the community with no discrimination against age or income. The Irvin Hotel rehabilitation explores preserving a piece of the town's history and finding a way to reawaken the downtown square of Kenmare, North Dakota by creating a night-time presence.

Intergenerational Interaction

This thesis explores the interaction between generations and focuses on engaging the elder generations with the younger generations. Many traits are fostered throughout these relationships. The elders can pass wisdom and knowledge on if the other generations are willing to listen.

“Older persons are not just ‘another problem’ to be addressed by society. They are a resource, provided that they are given the opportunity to be such.”¹

The U.S. Administration on Aging states one in five residents by 2030 will be sixty-five years or older. The fastest growing population in the U.S. is eighty-five and older (Generations United, 2007, 1). This is not the time to hide the elderly away in facilities and only visit on holidays; this is the time to encourage our children to gain knowledge and wisdom from this aging generation's experiences through interaction.

Mihalas, psychologist and clinical professor at ULCA, states the sense of belonging, hope, and feelings of security within a child are

strengthened from knowing elders. Children also gain a sense of history, context, and perspective from these interactions.

Heather Anderson encourages her two youngest children to interact with their elderly neighbors and even encourages her children to refer to their neighbors as “grandma” and “grandpa.” Anderson believes elderly friends give her children love without being judgmental, and the children give back “joy, youthfulness, [and] happiness” (Collins, 2014, para. 4).

Intergenerational interactions are not one-sided! Throughout these interactions youth develop skills, values, and a stronger sense of empowerment, leadership, and citizenship. Children have shown improved academic performance, enhanced social skills, a decrease in negative behavior, and increased stability by interacting with older adults on a regular basis (Generations United, 2007, 2-3).

Matt Fellow describes the conversations he has been able to have with elders as having greater depth and value than conversations with peers of the same age.

¹(Bull, 1993, p. 46)

Intergenerational Interaction

These interactions also add meaning to the elder's life. Children are able to fill an elder's life with energy and serve as a connection to the community. Usually, an elder focuses on family especially grandchildren. My grandparents were lucky enough to have ten of twelve grandchildren grow up within the same town they established their home forty-seven years ago. They were able to keep busy throughout retirement by following all of her grandchildren through the many sports each participated in.

Some elders are not as lucky to have grandchildren living within the same town. Once one reaches a certain age, he or she wants to share his or her memories and spend time with someone willing to listen. This thesis provides more options for the elderly to interact with community members of all ages. This thesis also presents the opportunity for one to add more worth to his or her life by making new social connections.

Many areas are now incorporating intergenerational programs between the elderly over the age of sixty and children. An

organization called Generations United focuses on "improving lives of children, youth, and older adults through intergenerational strategies" covering topics about family structure, drug use, violence, and bridging stereotypes and cultural differences (Generations United, 2007, 1).

"Intergenerational programs promote the transmission of cultural traditions and values from older to younger generations, helping to build a sense of personal and societal identity while encouraging tolerance."¹

The elderly want to have more impact on the community. According to a Princeton survey, half of the Americans aged between 50 and 70 years are interesting in holding a job (Generations United, 2007, 2). The elderly want to learn about the technological advances and how to send an e-mail. Young children are the perfect teachers because they are patient and know how to describe technology in simple terms.

¹(Generations United, 2007, 3)

²(URMC, 2015, para. 10)

December 14, 2015

"stay as vibrant, active, and social as you've always been"²

Once one retires, they are not interacting with people as much because they do not always have a reason to leave the comfort of home. One could maintain physical and emotional wellness as well as preserve cognitive function by remaining engaged and active within the community and socially maintaining relationships. Many who tend to remain socially engaged with friends, peers, and family versus becoming isolated and inactive maintain their health and tend to live longer.

"Enhanced relationship[s] can be viewed as preventive medicine."¹

Many benefits accompany the simple fact of being social including reduced health problems, reduced risk of dementia or Alzheimer's disease, and less chance of feeling depressed. The health encyclopedia sponsored by University of Rochester Medical Center suggests one to volunteer within the community, church, or school, visit a senior center and participate in activities offered, join a group of interest, attend

a class to learn something new, or join a fitness center.

According to Umberson and Montez, social relationships and social support have significant effects on health through behavioral, psychosocial, and physiological pathways. Social integration is defined as social involvement within informal, also known as relationships with family and peers, and formal relationships referred to as religious or volunteer organization involvement.

"Older adults with dementia or other cognitive impairments experience more positive effect during interactions with children than they did during non-intergenerational activities."²

An elder's well-being can depend greatly on whether he or she feels respected by younger generations. His or her well-being is overall higher with less chance of feeling ill mentally, emotionally, and physically. This perceived respect influences the older generation to remain connected, active, make significant contributions

¹(Umberson & Montez, 2010, p. 6)

²(Generations United, 2007, p. 2)

Intergenerational Interaction

to benefit future generations, and willing to pass along wisdom to younger generations.

Yoon states, “those who receive greater social support will have higher levels of life satisfaction.” Social support may indirectly effect health by helping reduce stress levels and fostering a meaningful purpose of life. One has an increased sense of responsibility to stay healthy, if he or she has meaningful social connections to rely on. The principal social ties vary over the course of life for health reasons ranging from parents and grandparents shaping a young child to adult children providing social support during the later stages of life.

“Social ties are a potential resource that can be harnessed to promote population health.”¹

The historic role of a community center was to enrich the life of residents by providing services and programs based on local needs and interests. Community centers are successful when programs draw users from their homes by offering a variety of activities and chances

to meet others informally. The center for social interaction offers lounge spaces for informal gatherings along with meeting rooms dedicated for formal gatherings. The gymnasium and pool spaces are chances for informal interaction among all users.

The goal of the center for social interaction is to provide opportunities for personal growth and to maintain contact with the community throughout all stages of life. The center for social interaction shall have a place to display a local’s artwork or serve as a place to exhibit students projects. The center shall also have a space to display advertisements and announcements for events happening within the community.

¹(Umberson & Montez, 2010, p. 7)
December 14, 2015

“Wherever there are beginners and experts, old and young, there is some kind of learning going on, some kind of teaching. We are all pupils and we are all teachers.”

- Gilbert Highet

Designing for Senior Living

This thesis explores providing senior living as if it were home. The senior citizens will be treated as tenants in an apartment building with assistance nearby when needed. This thesis *focuses on an independent living environment which allows a tenant to remain active and engaged* within their community to maintain cognitive and physical wellness.

Perkins (2009) states one should optimize resident privacy and dignity throughout designing a senior living facility. One should not design for the typical nursing home facility with two beds in one room divided by a curtain. Bathing within the typical facility is not private or dignified enough for residents either. The typical layout includes possibly individual restrooms and one shared public bathroom instead of having individual bathrooms or one shared bathroom among smaller groups of residents.

The incoming generation will not be willing to share a room with a stranger when their time comes to move into the home. Current senior housing facilities lack aesthetic beauty and inspiration. Adding a bit of character could help

residents to stay bright and motivated to keep moving and maintain their well-being.

Perkins (2009) states, “higher-end facilities are taking note of the design sensibility of hotel chains and applying their concepts to long-term care and assisted care and continuing care.”

Perkins provides simple solutions to create a homelike feeling. His suggestions include using carpet versus vinyl composition flooring for interior finishes. He also recommends “back of house” functions to be separated from the residential area and providing more concierge-like services.

New senior living facilities make sure to incorporate activity spaces for crafts and games and also provide classes to spark tenants interests.

The market desires choice.”¹

The future of senior housing is going to provide more options. Everyone prefers to have choices to decide from. The senior housing sector is becoming expensive with some paying over

¹(Perkins, 2009)

\$5,000 a month for care even for an inactive resident. By offering different levels of care versus the standard nursing home model, many are able to save money as well as age happier. Common options available include independent living, home care, or memory care. Active seniors are considering multi-generational housing for the chance of interaction with younger generations.

Location of senior living is key. Many active retirees want to continue working and being apart of the community. Downtown cores offers as a great venue for one to access amenities plus pick-up a part-time job. A downtown or more urban area may offer recreational, cultural, and educational amenities that one can easily access, whereas a residential neighborhood or the suburbs do not offer nearby proximity.

Most recently developed senior living facilities offer physical and visual connections to nature, increased common spaces, offer more flexibility and desired amenities within residential units, wellness and fitness spaces, and follow sustainable practices, such as abundant daylighting and good indoor air quality.

“The household model has become the dominant approach for long-term care environments.”¹

The household model usually consists ten to sixteen private resident rooms accompanied by a full bathroom with all units sharing kitchen, dining area, and living room space.

Other approaches include hospitality and community-focused. Many layouts include small lounges to break up the corridor so it doesn't seem as long and to encourage neighbors to socially interact.

Innovative ideas start to personalize the exterior of the unit and make the unit itself be treated as a single-family dwelling unit on a neighborhood street. One example added interior windows to the corridor with the ability for drapes to be closed to reserve privacy but this allows one to interact with the semi-public corridor and increase chance interactions with other residents.

Other suggestions went as far as adding distinctive lighting to distinguish the entrances,

¹(AIA, 2010, p. 13)

Design for Senior Living

doorbells, and “house” numbers, along with plants within the corridor.

Community-focused senior living programs offer services available to the public not limited to a restaurant, wellness center, or performance spaces. Senior living is approached with mixed-use methodology increasing the density and activity of the building itself and focusing on accessibility to nearby community resources.

The Irvin Hotel rehabilitation proposes a mixed-use program encouraging public interaction. The mixed residential encourages a diversity of users. The basement will have a banquet room available for use by anyone and a restaurant for anyone to dine within. The lobby could become the place for morning coffee.

The senior living provided within the Irvin Hotel will have a nurse on-call to assist a resident with any needs. Possible assistance with checking blood pressure daily or transportation to medical appointments and grocery trips.

“[One] can build an environment for the aging that is confusing, imprisoning, and depressing, or [one] can build one that frees them, encourages them, and enhances their quality of life.”

- Bradford Perkins

Apartment Floor Plan Analysis

Several case studies researched during the proposal phase had several apartment layout options. This section gives an opportunity to compare square footages and layouts to one another to find the perfect balance for the senior living apartments and residential apartments programmed. The spaces should allow flexibility with pocket doors and partition walls so a resident can easily change the space's function.

The layouts should be a linear design because of the existing Irvin Hotel structure. If the double corridor will be kept, then the units will need to remain only 11'-6" or 16'-4" deep. If a single corridor is used, then the overall depth must remain under 27'-10" to allow for a 5'-0" wide hallway to the North.

Design for Aging Review states studio apartments only account for four percent of independent living units averaging 658 NSF. One bedroom apartments had the most quantity available averaging 730 NSF per unit. When only independent living was offered, the NSF lowered to 362 NSF for studio and 570 NSF for one bedroom units. Commons areas were allotted 74 NSF per unit.

Layout	Floor Plan Layouts					Overall
	Bed 1	Bed 2	Bath	Kitchen	Living	
Poplar	121		66	97	130	471
Spruce	129	110	66	88	121	676
Cedar	138	125	48	95	271	825
Birch	110		50	65	100	542
Cottonwood	116		53	99	110	581
Apple	138		45	90	121	587
Ash	131		65	114	177	713
Sassafrass	116		66	108	168	665
Sycamore	119		50	87	160	611
Willow	152		48	100	170	798
Maple	173		45	80	202	830
Linden	119	70	60	95	226	905
Elm	158	140	48	91	140	949
Oak	161	127	66	120	182	1,071
Hickory	110	110	50	114	329	1,089
Cherry	156	138	50	96	341	1,046
AM 1	138		60	60	252	675
AM 2	137		60	64	138	555
AM 3	218	160	96	173	182	1,005
AM 4	110	90	82	60	143	737
AM 5	159	133	54	60	320	913
Unit 2	145		38	95	173	550
Unit 3	127		45	64	182	600
Unit 4	110		43	153	208	700
Unit 5	131	116	45	100	200	650
Unit 6	175	147	45	100	120	800
Unit 7	128	105	48	145	208	900
GN Unit A	144		65	66	180	519
GN Unit B	120		54	50	180	530
GN Unit E (H)	160		50	72	297	826
Average SF	138	121	55	93	191	744



Fig. 97.1 - U. 6

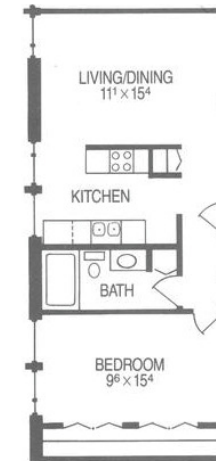


Fig. 97.8 - U. 2

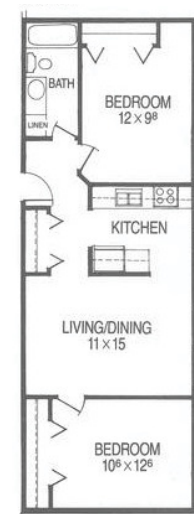


Fig. 97.2 - U. 5

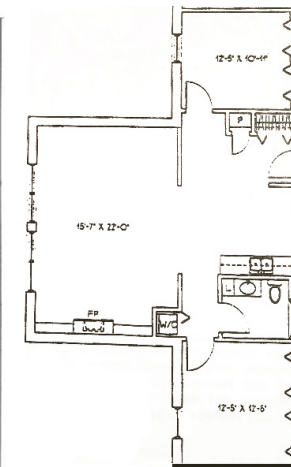


Fig. 97.3 - Cherry

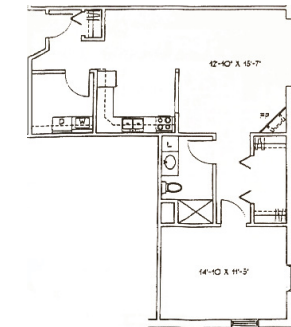


Fig. 97.9 - Maple

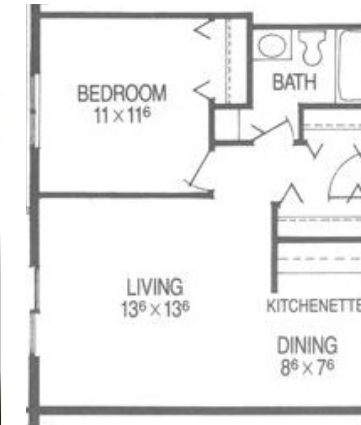


Fig. 97.4 - U. 3

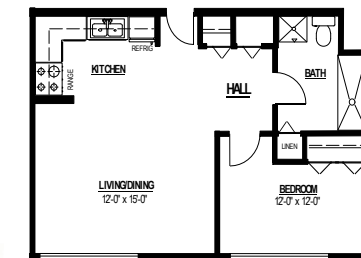


Fig. 97.6 - GN A

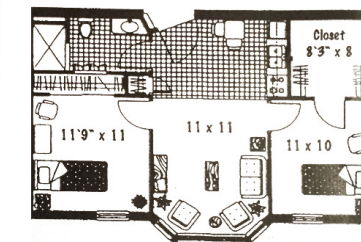


Fig. 97.10 - Spruce

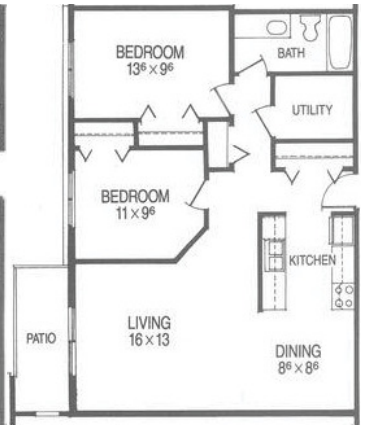


Fig. 97.5 - U. 7

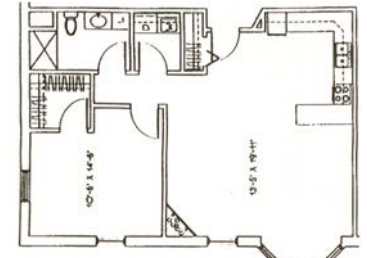


Fig. 97.7 - Willow

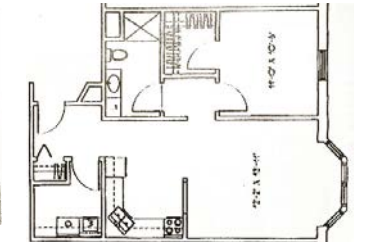


Fig. 97.11 - Sassafrass

Historic Rehabilitation

Historic rehabilitation shall preserve the character and dignity of a historic structure. Rehabilitation is considered for adaptive reuse whereas preservation is to maintain a property at its current condition without significant alteration. The entire process is said to have a correct way of completion; however, the process is subjective and based on personal choice or belief.

This thesis explores historic rehabilitation of the Irvin Hotel with emphasis on preserving as much as possible. The occupancy use will be slightly altered as well as interior partitions on the second and third floor. A building represents the past through an architectural style or prior significant use. The Irvin Hotel once served as the welcome gate to Kenmare. Whatever the reason for any building's significance, the historic character should be preserved as much as possible.

Conservation ethics as stated by Tyler include recording existing condition of the building before any intervention. In an effort to preserve historic integrity, historic evidence must not be destroyed, falsified, or removed. Any intervention

must be minimum and governed with respect for the aesthetic, historical, and physical integrity of cultural property. All methods and materials used during treatment must be fully documented.

“Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property’s historic character.”¹

Rehabilitation process involves undertaking repairs and updating systems to meet code standards of today for occupancy uses. A delicate balance must be mastered when updating the building systems including electrical, mechanical, and plumbing. The process requires creativity and respect to the original integrity. The process of replacing all of the lines requires one to open partition walls resulting in removal of historic materials and altering the historic integrity.

Important considerations are to be taken for any alterations. Alterations shall be minimize changing or destroying elements of historic integrity and shall be reversible in case a new method or better technology is discovered.

¹(WBDG, 2015, para. 5)

December 14, 2015

Alterations shall consider historical sense of materials, features, and space. Any new materials shall be distinct in a manner that contrasts the existing historic materials. One should not try to mimic and recreate historic details because the original detail's significance may be lost.

As with any older building, they do not all abide by Americans with Disabilities Act of 1990 adopted into law after the buildings were constructed. Historic preservation brief provided by the National Park Service states that defined spaces must be protected from any anticipated changes to preserve historic character. The prominent public entrance shall be accessible as well as main goods, services, programs, restrooms, and amenities and secondary spaces.

Any accessible modifications should be in scale with the historic property, visually compatible, and whenever possible, reversible. The addition of an outside ramp shall be compatible with the existing structure and materials. Porch railings and steps should preserve the overall historic setting and character of the property. Accessibility alterations should create a space for everyone not separate the disabled from the able.



Fig. 99.1 - Lobby Desk



Fig. 99.2 - Lobby
Fig. 99.3 - Corner Sink

Fig. 99.4 - Historic Layout

Rural Small Town Living

The small town life allows one to do what they want to an extent. Regulations are not as restrictive as they are in larger cities. The old town charm and character attracts some for a weekend getaway and others for a lifetime of peace, quiet, and relaxation.

Persons living in a rural area tend to be more independent, self-reliant, and religious. Social connections are made on a deeper level because everyone is already an acquaintance of one another. Rural residents also tend to be more family oriented.

Rural residents rely on social networks to provide support and other services that formal agencies provide in urban areas. Social support and acknowledging religious or spirituality reflect positively on subjective well-being among older adults in rural areas. A rural resident is more likely to turn to his or her pastor for help with emotional, mental, and relationship problems.

A community's infrastructure affects an individual's wellbeing more than one would be led to believe. Sustaining social well-being within

one's environment depends on what services are provided. Social opportunities to interact can be satisfied easily by providing a library, coffee shop, or community venue where people can gather.

A good community according to University of Minnesota is made by providing adequate housing for all income levels, affordable transit, maintained roads, safe and effective school system, adult education and training opportunities, accessible and well-kept parks, community spaces, access to culture and arts, library, trustworthy law enforcement, emergency services, healthcare options, communication through mail, internet, landline, and cellular service. Most rural, small towns cannot support all of these functions that are necessary to a self-sustaining community. Kenmare is one of those towns that does offer an avenue for all of these necessities, but some of the services could be improved upon. This thesis exploration looks into improving the community spaces and adequate housing available.

The community's infrastructure also plays a part on an individual's health. Healthy behaviors can also be reinforced by providing well lit sidewalks or safe streets and appealing vegetated spaces

for one to engage with. A small rural town is typically thought of as safe enough to let young children ride bike by themselves encourages a more active childhood versus a larger more urban community where parents are afraid to let their kids wonder alone. The restriction on playing outside alone causes children to stay inside leading to a sedentary lifestyle of video gaming and binge watching television.

Not all of the small, rural towns of America can support the infrastructure needed to be a viable, healthy community that encourages residents to focus on all aspects of well-being, feel engaged, and sense of belonging within the community but Kenmare does. Comments from friends and family express Kenmare as a safe and friendly community. Parents are not afraid to have their kids walk to school, ride bike to the pool, or walk to a friends house alone.

Kenmare is sought as a quiet, safe, low traffic and low crime community. Morals and values are shared amongst neighbors causing less conflict. The children are raised to work hard to achieve what they want out of life. Many residents also know how to cut loose after a good day's work. Invitations are not required whether it is an after

bar party, wedding dance, or a football watch party.

Children are allowed to grow up with a broader imagination. Kids use their imagination invent new games to pass time with friends because there is not as many options for an organized activity. With the lower cost of living, families tend to have a greater chance of traveling allowing their kids to see and compare rural to urban environments.

In a small, rural town, a child grows up learning about and seeing firsthand agriculture and industrial practices. Services may be limited encouraging one to become more self-reliant by learning how to repair the minor things. One can easily escape to the vast openness that surrounds a small, rural town. One can drive down a two-lane highway and become lost in thoughts while passing by fields of green, gold, and blue.

A huge benefit to living in a small town is the small but effective school system. The school system allows a student and teacher to connect on a personal level. Most of the teachers reside within city limits allowing a student to see them outside of the classroom at a game,

Rural Small Town Living

church service, or store. A child is not a number but a face and name because the teacher is accountable to not only the parents but also grandparents, aunts, uncles, and many others mutual acquaintances. Students are allowed to get to know all of their classmates along with upper and lower classmen instead of a student being lost in a large class and only knowing a few members of his or her class. A smaller town allows one to increase his or her social network to include peers who are older and younger.

One aspect that could be seen as a disadvantage or advantage is one's paycheck may last longer because of the reduced options of dining, shopping, and services. A disadvantage may be that only a handful of people tend to do the work for the majority. Only a few are involved in organizations and usually hold multiple leadership positions within the community. Even with the added responsibility for some, the lower stress way of life is well worth it.

Smaller communities are mainly composed of sole proprietors and cooperatives and no big box retailers or chain food restaurants. The individual

effort allows one to be more involved emotionally and physically within a community's success.

Rural communities attract the aging population. Twenty-five to thirty-three percent of America's elderly population live in a rural setting according to Kaiser and Camp. In rural states, the percentage increases to about sixty-one percent of elderly live in small towns and rural areas. Over twenty-five percent of elderly return to a rural or non-metropolitan area after migrating away from the smaller rural community in their youth to explore economic opportunities. Most return to their hometown or to their home state because of family or to reconnect with their roots.

When elderly live in a smaller community they are more likely to be active within a senior center or community and maintain relationships with children and friends. Rural senior center participants are more likely to participate in other community activities.

A community building, like the Center for Social Interaction, shall be "highly visible facility where anyone in a community can obtain information and access to services" (Bull, 1993, p. 61).

¹(Bull, 1993, p. 48)

"With active participation of the elderly, rural communities may be in a stronger position, not only to survive but to thrive."¹

"Despite all that has been written about the problems of out-migration, isolation, and lack of services, there is no indication that [a rural] community significantly impacts either the availability or receipt of informal social support for either young, middle-aged, or older adults. (Bull, 1993, p.114).

Overlooked benefits include minimum commutes and virtually nonexistent wait lines. It is easy to be known in a small town which can be interpreted as an advantage or disadvantage. It is easy for one to be recognized in the town newspaper and fairly easy to make the front page. It is also easy to get caught within the rumor mill, although the good outweighs the bad because gossip happens in any social environment. Living in a small town allows one to be able to name and know all of his or her neighbors on a personal level. A small town's population grows from heritage and tradition. Most families have roots tracing back 100 years.

A rural setting is best for the mixed-use thesis solution proposed within this thesis program. The center for social interaction addresses a broader utility within the community offering a venue to serve various needs instead of specializing on one purpose. The intergenerational purposes provide an opportunity in a smaller community for members to reconnect and expand social networks because of the smaller sized population.

Program Space Allocation

Irvin Hotel			
Space	Qty	SF	Total
Lobby	1	1500	1500
Banquet Room	1	1225	1225
Community Spaces	1	300	300
Restroom	4	120	480
Lounge	2	200	400
Storage			1000
Staff Room	1	160	160
Historic Hotel Rooms			
Dry	2	100	200
Wet	6	160	960
Full BR	2	195	390
Suite	1	295	295
Shared Showers & Restroom	2	175	350
Laundry Facilities	1	292	292
Resident	2	100	200
Senior Living Apartments			
Efficiency	4	350	1400
1 Bedroom	3	580	1740
Apartments			
Efficiency	2	350	700
1 Bedroom	2	600	1200
2 Bedroom	2	760	1520
Nurse/Owner Living Space	2	1200	2400
Kitchen	1	500	500
Dining Room	1	1500	1500
Mechanical		10%	2500
Circulation		15%	3750
Totals			24962

Center for Social Interaction			
Space	Qty	SF	Total
Lobby	1	1000	1000
Banquet Room	4	735	2940
Community Spaces	1	300	300
Restroom	6	120	720
Lounge	4	200	800
Storage			1000
Staff Room	1	160	160
Office	1	150	150
Concession Service	1	500	500
Therapeutic Pool	1	1500	1500
Swimming Pool	1	1972	1972
Pool-side Rooms	2	300	600
Hot Tub	1	180	180
Sauna	1	150	150
Locker Rooms	2	250	500
Family	1	120	120
Small	2	175	350
Gymnasium	1	5640	5640
Mechanical		10%	2500
Circulation		15%	3750
Totals			24832

Program Space Allocation Irvin Hotel

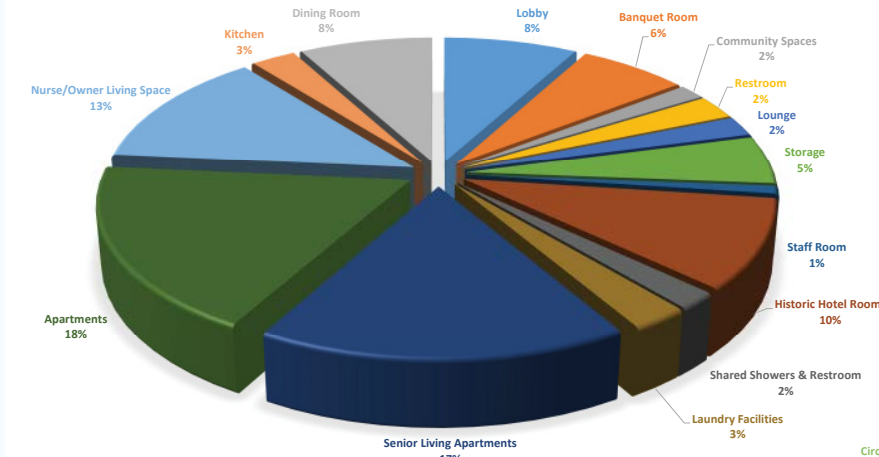


Figure 105.1 - Space Distribution: Irvin Hotel

Program Space Allocation Center for Social Interaction

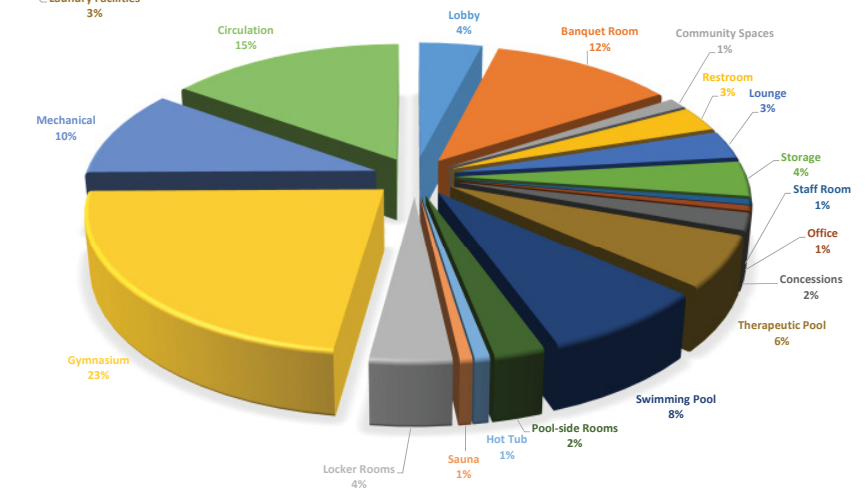


Figure 105.2 - Space Distribution: Center for Social Interaction

Program Space Allocation Irvin Hotel

Fire Safety Requirements:

- Occupancy Type: A-3, R-1, R-2
- Construction Type: IIIB; 2-hour resistive exterior wall
- Fire Rating of Walls: 1-hr for all apartment dividing walls
- Fire Rating of Doors: 20 minutes

Existing exterior egress includes two stairways. The first is centrally located near the lobby which exits out the main vestibule stairway. The second is a metal staircase attached to the West facade of the building at the end of the hallway. The basement has two interior stairways, the servant's quarter and main vestibule entry, as well as two exterior stairwells providing direct access from the sidewalk.

The overall heating, ventilation, and air condition requirements for the Irvin Hotel portion of this project are standardized to these specific values. Any room differing from these set standards will be noted within the room.

- Desired Room Temperature: 68° F - 72° F
- Desired Room Relative Humidity: < 50%
- Colder Climate: 30% - 40%

Final space allocations will include mechanical, storage, and circulation.

Lobby: a space to gather

The existing lobby will be preserved as much as possible because it offers a grand entryway for hotel guests and residents of the building. The lobby has terrazzo floors, a custom built check-in desk, and gracious picture windows making the space bright and cheery. The lobby also has a fireplace located in the southeast corner.

1,500 square footage 100 maximum occupancy
13'-6" ceiling height

Connected Spaces: entry vestibule, elevator, owner's apartment, and historic outdoor porch
Adjacent Spaces: hotel rooms, public restrooms, and staff services

air changes/hour: 4 lighting: 20 fc



Restaurant Dining: a space to socialize

The prior restaurant was placed within the day lit basement. This space is severely deteriorated and is in need of all new materials and configuration.

1,500 square footage 100 maximum occupancy
13'-6" ceiling height 15-18 sf/seat

Connected Spaces: kitchen, entry vestibule, outdoor entries, elevator
Adjacent Spaces: public restrooms, banquet room

air changes/hour: 12-15 lighting: 20 fc



Historic Hotel Rooms: a space to experience history

quantity: 11

The existing hotel rooms located along the south facade will be preserved within their original size from 1915. Each guest room has a transom above the door, double encasement window, and steam-heated radiator.

100 sf: Dry (2) 295 sf: Suite (1)
160 sf: Wet (6) 9'-0" ceiling height
195 sf: Full BR (2) 2 maximum occupancy

Connected Spaces: hallway
Adjacent Spaces: public restrooms and showers, housekeeping

air changes/hour: 2 lighting: 30 fc



Public Restrooms and Showers

quantity: 2

Existing hotel rooms on the first floor, specifically along the North facade bordering the Owner's Apartment will be transformed into public restrooms with private shower/dressing stalls for guests.

175 square footage
8'-6" ceiling height

Connected Spaces: hallway
Adjacent Spaces: historic hotel rooms, lobby, housekeeping

Fixtures: 4 shower stalls, 4 toilet stalls, 3 lavatories

air changes/hour: 6 lighting: 20 fc



Kitchen: a space for a chef

The existing kitchen has an elevated window, below grade outdoor entry, and direct access to the prior servant's quarters and back stairway to access all guest rooms. The area needs to be upgraded and brought to code.

500 square footage 16'-0" ceiling height

Connected Spaces: restaurant dining, storage
Adjacent Spaces: public restrooms, elevator, banquet room

Equipment: 6 range stove, double oven, broiler, fryer, microwave, freezer, refrigerator, ice machine, sinks, dishwasher

air changes/hour: 15-60
lighting: 50 fc



Banquet Room: a space for social gatherings

The existing banquet room is to the right of entry stairway located underneath the owner's apartment. The space has windows located under the entry porch to the owner's apartment. The space is severely deteriorated as is.

1,225 square footage 82 maximum occupancy
13'-6" ceiling height

Connected Spaces: entry vestibule
Adjacent Spaces: restaurant dining, kitchen, public restrooms, elevator

air changes/hour: 6 lighting: 30 fc



Apartments: a space for living

quantity: 6

A space for living, dining, entertaining, and sleeping.
Bedrooms: efficiency, 1, or 2 Bathrooms: 1 or 2

350 sf: efficiency (2) 2-6 maximum occupancy
600 sf: 1 bed (2) 9'-0" ceiling height
760 sf: 2 bed (2)

Connected Spaces: hallway
Adjacent Spaces: laundry facilities
Rooms within: bathroom, bedroom(s), kitchen/dining, living

Equipment: oven and range, refrigerator/freezer, microwave, and dishwasher

air changes/hour: 1-2
lighting: 30 fc
50 fc (kitchen)



Staff Room: a space for lunch, talking, and breaks

The staff room is great for coworkers to become friends.

160 square footage 10 maximum occupancy
9'-0" ceiling height

Connected Spaces: hallway
Adjacent Spaces: lobby, laundry facilities

Equipment: microwave, toaster, refrigerator/freezer, pizza oven

air changes/hour: 4 lighting: 50 fc



Nurse & Owner Living Space: a space for work and living

quantity: 2

A space living, bathing, dining, and work.

1,200 square footage 6 maximum occupancy
9'-0" ceiling height

Connected Spaces: hallway
Adjacent Spaces: senior living apartments
Rooms within: bedroom(s), bathroom(s), kitchen/dining, living, office for paperwork and supplies

Equipment: oven and range, refrigerator/freezer, microwave, dishwasher, washer, and dryer

air changes/hour: 1-2
lighting: 30 fc
50 fc (kitchen)



Public Restrooms

quantity: 2

Space within the basement will need to be allocated to restrooms for guests and workers.

120 square footage
8'-6" ceiling height

Connected Spaces: hallway
Adjacent Spaces: restaurant dining, kitchen, banquet room

Fixtures: 3 toilet stalls, 2 lavatories

air changes/hour: 6 lighting: 20 fc



Senior Living Apartments: a space for living

quantity: 7

A space for living, dining, entertaining, and sleeping in an efficiency/one-bedroom setting.

580 sf: 1 bed (3) 2 maximum occupancy
350 sf: efficiency (4) 9'-0" ceiling height

Connected Spaces: hallway
Adjacent Spaces: laundry facilities
Rooms within: bathroom, bedroom, kitchen/dining, living

Equipment: oven and range, refrigerator/freezer, microwave, and dishwasher

air changes/hour: 1-2
lighting: 30 fc
50 fc (kitchen)



Laundry Facility: a space for washing

quantity: 3

Laundry facilities for housekeeping and apartments.

292 sf: housekeeping 100 sf: resident use
9'-0" ceiling height

Connected Spaces: hallway
Adjacent Spaces: historic hotel rooms or senior living apartments, or apartments

Equipment: two dryers & two washers

air changes/hour: 10-15 lighting: 50 fc



Community Spaces: a space for gathering

A space for watching TV/movies, community kitchen/dining space, or activity room for cards and games.

300 square footage 20 maximum occupancy
9'-0" ceiling height

Connected Spaces: hallway
Adjacent Spaces: laundry facilities, senior living apartments

Equipment: oven and range, refrigerator/freezer, microwave, and dishwasher

air changes/hour: 4 lighting: 50 fc



Lounge: a space for informal gatherings

quantity: 2

The lounges shall encourage informal interaction among all generations and users.

200 square footage 10 maximum occupancy
10'-0" ceiling height

Connected Spaces: lobby
Adjacent Spaces: apartments, dining

air changes/hour: 4 lighting: 30 fc



Program Space Allocation Center for Social Interaction

Fire Safety Requirements:

- Occupancy Type: A-2, A-3
- Construction Type: IIB or IIIB (2-hr fire resistivity: exterior)
- Fire Rating of Walls: elevator, stairwells, and exit access
- Fire Rating of Doors: dependent on fire-rating of wall

Exit egress will be mainly done throughout the two stair towers. The stair towers must be a maximum distance (diagonal distance of floor plate divided by 2) away from each other to meet code requirements.

The overall heating, ventilation, and air condition requirements for the Center for Social Interaction portion of this project are standardized to these specific values. Any room differing from these set standards will be noted within the room. The pool area needs to have specialty ventilation for the chlorine levels. The gymnasium will have additional air conditioning to keep the gym comfortable.

- Desired Room Temperature: 70° F
- Desired Room Relative Humidity: < 50%
- Colder Climate: 30% - 40%

Final space allocations will include mechanical, storage, and circulation.

Gymnasium: a space for exercising and recreation

The gymnasium offers an alternative place for one to be active with friends and family versus an inactive option. Seating will need to be incorporated as well.

5,640 square footage 376 maximum occupancy
25'-0" ceiling height

Connected Spaces: lounge
Adjacent Spaces: locker rooms, restrooms, elevator

Court Dimensions: 84'x 50'

air changes/hour: 30 lighting: 100 fc



Locker Rooms

Locker rooms must serve the gymnasium and pool. Men's, women's, and family locker room will be located next to the pool. Adjacent to the gym will be smaller locker room facilities for men and women.

250 sf: men & women 10'-0" ceiling height
120 sf: family 175 sf: small

Connected Spaces: hallway
Adjacent Spaces: gymnasium, pool

Fixtures: 4 shower stalls, 4 toilet stalls, 2 lavatories

air changes/hour: 6 lighting: 20 fc



Therapeutic Pool: a space for relaxing and comfort

The therapeutic pool attracts all generations, whether it is the pool aerobics class or a teen after playing an intense game of football or basketball.

1,500 square footage 20 maximum occupancy
25'-0" ceiling height

Connected Spaces: swimming pool
Adjacent Spaces: locker rooms, restrooms, concessions, sauna, hot tub

Desired Room Relative Humidity: 50-60%

air changes/hour: 20-30 lighting: 75 fc



Swimming Pool: a space for activity

The swimming pool offers as a year round place for friends and family to meet for recreation.

1,972 square footage 50 maximum occupancy
24'-0" ceiling height

Connected Spaces: therapeutic pool
Adjacent Spaces: locker rooms, restrooms, concessions, sauna, hot tub

Desired Room Relative Humidity: 50-60%

air changes/hour: 20-30 lighting: 75 fc



Hot Tub: a space for relaxing and comfort

An outdoor hot tub offers all generations a place to meet with friends and family. Privacy screens may also be required.

180 square footage 10 maximum occupancy
24'-0" ceiling height

Connected Spaces: outdoor seating and grilling area
Adjacent Spaces: locker rooms, restrooms

Adequate lighting for outdoor use in the winter.

lighting: 30 fc



Sauna: a space for contemplation

A space to relax and purify.

150 square footage 14 maximum occupancy
12'-0" ceiling height

Connected Spaces:
Adjacent Spaces: locker rooms, restrooms, hot tub, swimming pool, therapeutic pool

lighting: 30 fc



Pool-Side Rooms: a space for pool parties

quantity: 2

A space to celebrate. The room shall be divided by a partition wall so the room can hold a larger or smaller group.

300 square footage 20 maximum occupancy
10'-0" ceiling height

Connected Spaces: swimming pool
Adjacent Spaces: locker rooms, restrooms

Equipment: refrigerator/freezer, sink, microwave

air changes/hour: 15 lighting: 30 fc



Meeting Rooms: a space for gatherings

quantity: 4

A space to celebrate. One larger room shall be divided by multiple partition walls to accompany a bridal shower, low-impact exercise, education class, or anniversary party.

735 square footage 49 maximum occupancy
10'-0" ceiling height

Connected Spaces:
Adjacent Spaces: restrooms, walking track

air changes/hour: 6 lighting: 30 fc



Public Restrooms

quantity: 6

Space within the basement will need to be allocated to restrooms for guests and workers.

120 square footage
8'-6" ceiling height

Connected Spaces: hallway
Adjacent Spaces: gymnasium, meeting rooms, concessions

air changes/hour: 6 lighting: 20 fc



Concessions: a space for snack time

Space for juice, shakes, snacks for kids swimming, teens playing basketball, and all other users.

500 square footage
12'-0" ceiling height

Connected Spaces: lobby
Adjacent Spaces: swimming pool, therapeutic pool, gym

Equipment: dishwasher, smoothie blender, range/oven, microwave, sink

air changes/hour: 12-15 lighting: 50 fc



Lobby: a space for check-in

The lobby shall offer seating and a place to pay membership.

1,000 square footage 67 maximum occupancy
20'-0" ceiling height

Connected Spaces: lounge, concessions, locker rooms
Adjacent Spaces: swimming pool, therapeutic pool, hot tub

air changes/hour: 4 lighting: 30 fc



Lounge: a space for informal gatherings

quantity: 5

The lounges shall encourage informal interaction among all generations and users.

200 sf: Lounge 10 maximum occupancy
300 sf: Community 10'-0" ceiling height

Connected Spaces: lobby
Adjacent Spaces: locker rooms, gymnasium, meeting rooms

air changes/hour: 4 lighting: 30 fc



Office: a space for management

The office shall be used by the manager of the complex to book meeting rooms and run daily business operations.

150 square footage 1-3 maximum occupancy
9'-0" ceiling height

Connected Spaces: lobby
Adjacent Spaces:

air changes/hour: 4 lighting: 50 fc



Staff Room: a space for lunch, talking, and breaks

The staff room is great for coworkers to become friends.

160 square footage 10 maximum occupancy
9'-0" ceiling height

Connected Spaces: hallway
Adjacent Spaces: lobby, restroom

Equipment: microwave, toaster, refrigerator/freezer, pizza oven

air changes/hour: 4 lighting: 50 fc



Project Justification & Expectations

renew the community spirit

This thesis explores the opportunity of reviving two vacant, abandoned lots within a small rural community. This thesis expects to unite generations through additional opportunities to interact and informally connect throughout the year but especially during the prolonged winter months. The downtown atmosphere is expected to be revived by providing more options for residents and guests of Kenmare, North Dakota.

revive the quality of small town life

This thesis expects to foster activity by providing opportunities that will encourage residents and guests of Kenmare to connect with the rest of the community which may not happen on a typical basis. The center focuses on providing an unreserved, pure public space to fill the voids of services not provided to the community.

reawaken the hope of small town life

The development will reawaken the rural community because the services offer interest and will increase downtown commerce by prominently placing residential for seniors, families, and singles in the downtown core.

The overall goal is to give back to a community that shaped who I am and show the residents of Kenmare their town is worth investing in even if it is a small town not many have heard of.

The Design Process

First, I measured the exterior and interior of the Irvin Hotel. The Irvin Hotel was modeled as is in Revit to have an accurate building footprint, existing load-bearing wall placement, and existing floor layout for the first floor to work with in the design phases.

Second, initial forms were developed for the Center for Social Interaction (CSI) via schematic floor plans, sketching, and 3D modeling.

Third, the existing site topography was translated into a 3D form in Revit.

Fourth, design sketches and iterations were developed and modeled in Revit.

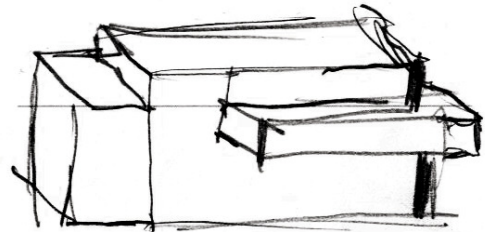


Figure 116.1 - Form Sketch of Center for Social Interaction

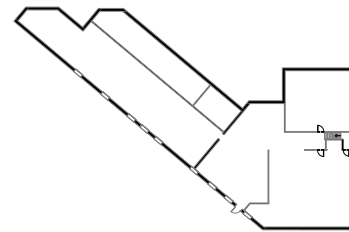


Figure 116.2 - Ex. Basement

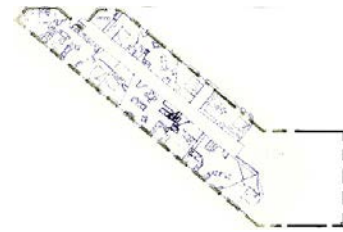


Figure 116.3 - Layout Sketch

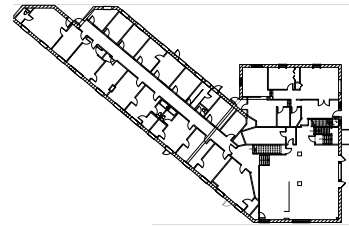


Figure 116.4 - Ex. First

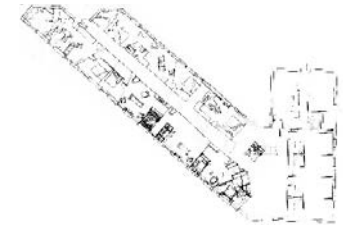


Figure 116.5 - Layout Sketch

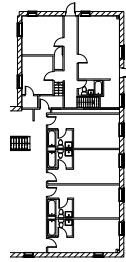


Figure 116.6 - Partial Ex. Second

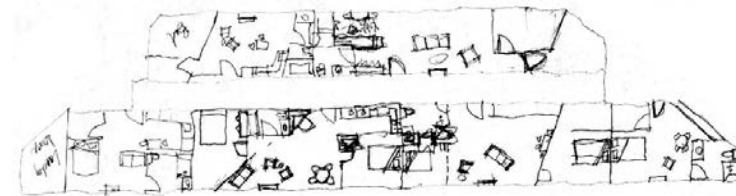


Figure 116.7 - New Apartment Layout Sketch

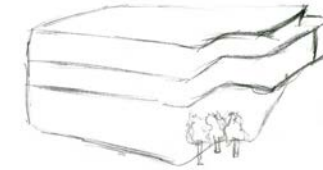


Figure 117.1 - Form Sketch

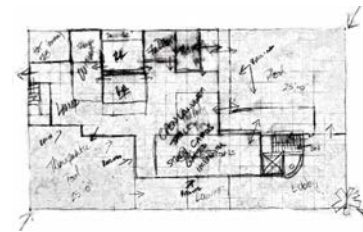


Figure 117.2 - CSI Plan Sketch



Figure 117.9 - Material Study

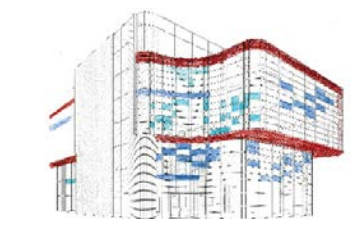


Figure 117.10 - Material Study

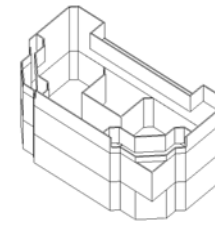


Figure 117.3 - Process Model

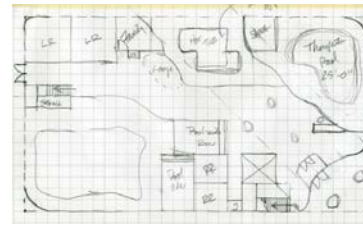


Figure 117.4 - CSI Plan Sketch

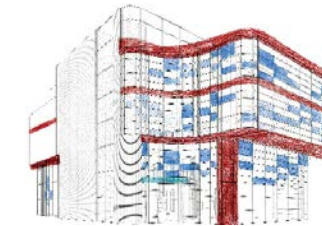


Figure 117.11 - Material Study

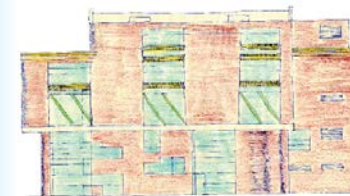


Figure 117.5 - North Elevation



Figure 117.6 - CSI Plan Sketch



Figure 117.12 & 117.13 & 117.14 - Structural Sketch Model

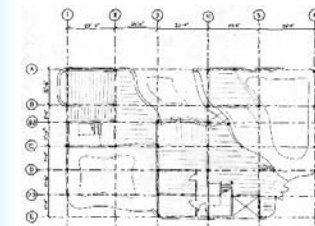


Figure 117.7 & 117.8 - Structural Layout Sketch

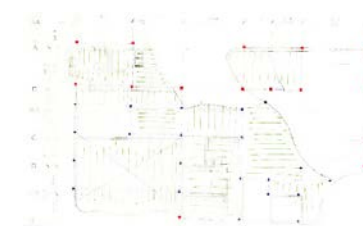


Figure 117.15 & 117.16 - Structural Layout Sketch

Final Building Program

Irvin Hotel			
Space	Qty	SF	Total
Lobby	1	1023	1023
Banquet Room	1	843	843
Community Spaces	1	184	184
Restroom	3	59	177
Storage		2983	2983
Staff Room	1	93	93
Historic Hotel Rooms			
Dry	6	147	882
Wet	4	171	682
Full BR	2	250	499
Suite	1	448	448
Shared Showers & Restroom	2	174	348
Laundry Facilities	1	319	319
Resident	2	88	176
Senior Living Apartments			
Efficiency	4	453	1810
1 Bedroom	2	511	1022
2 Bedroom	2	691	1381
Apartments			
Efficiency	3	450	1351
1 Bedroom	2	518	1036
2 Bedroom	3	690	2070
Nurse/Owner Living Space	2	1062.5	2125
Nurse Office	1	83	83
Kitchen	1	954	954
Dining Room	1	1381	1381
Mechanical		332	332
Circulation		4309	4309
Totals			26511

Center for Social Interaction			
Space	Qty	SF	Total
Lobby (included in Circulation)			
Banquet Room		6012	6012
Outdoor Patio		1997	1997
Community Space	1	1115	1115
Restroom	10	178	1780
Storage		730	730
Staff Room	1	94	94
Office	1	119	119
Concession Service	1	562	562
Aerobic Space	1	1111	1111
Therapeutic Pool	1	1204	1204
Swimming Pool	1	1589	1589
Pool-side Rooms	1	246	246
Outdoor Hot Tub	1	733	733
Sauna	1	110	110
Locker Rooms	2	286	571
Family	1	149	149
Small	2	215	429
Basketball Court	1	4245	4245
Mechanical		5858	5858
Circulation		10412	10412
Totals			39066

Feasibility Study

Irvin Hotel

The Irvin Hotel rehabilitation and new development of The MILL have been determined feasible according to the information below.

Irvin Hotel will cost approximately \$5 million to retrofit with an estimation of \$180/SF. This cost includes the architectural fee and entirely updated mechanical and electrical system. The funding for this project will primarily be from six investors coming up with \$3.15 million. The additional \$2 million will be in the form of a loan acquired at one of the three financial institutions serving Kenmare, North Dakota. The interest rate has been estimated at 4% over a 30 year period.

The expenses associated with the Irvin Hotel are laid out within the Income Statement. The historic hotel portion has been calculated at an estimated \$85/night with a 50% occupancy. The venue space has been estimated as having a rental fee of \$250/5 hours. The independent living rates have been projected at \$3,000 for an efficiency unit, \$3500 for a one bedroom unit, and \$4000 for a two bedroom unit. The apartments open to anyone will have rates of \$500, \$650, and \$850.

The MILL

The MILL will cost approximately \$9.2 million as new construction estimated at \$225/SF. The funding for this project will be \$1 million in grants, \$800,000 in donations and fundraising by the community, \$5.76 million in mill levies, and a \$2 million loan from Bank of North Dakota at 1% interest rate. One mill levy in Kenmare, North Dakota generates \$3200 annually. The MILL will need the members of the community to vote for a 60 Mill Levy increase for 30 years. Membership rates have been set at \$15/day for a guest, \$75/month for a family, and \$35/month for a single membership. The venue space will have varying rental rates due to the ability to serve diverse uses.

The expenses are a calculated estimation. The Income Statement and Cash Flow Statement show that the Irvin Hotel and The MILL will both be profitable.

Feasibility Study

The Irvin Hotel & The MILL
Income Statement
April 16, 2016

	Irvin Hotel					Overall	The MILL			Overall
	Restaurant	Banquet Room	Hotel	Independent Living	Apartments		Recreation	Concessions	Venue Space	
Revenue										
Rent		\$ 45,000	\$ 201,663	\$ 324,000	\$ 64,200	\$ 634,863		\$ 156,000	\$ 156,000	
Food Sales (Gross Margin)	\$ 400,000					\$ 400,000	\$ 150,000		\$ 150,000	
Membership Dues						\$ -	\$ 415,000		\$ 415,000	
Kenmare FUND ITT						\$ 40,000			\$ 40,000	
Mill Levy									\$ 192,000	
Total Revenue						\$ 1,074,863			\$ 913,000	
Expenditures										
Depreciation						\$ 122,500			\$ -	
Insurance						24,500			44,000	
Interest						80,000			175,000	
Legal & Accounting						12,000			12,000	
Payroll	303,680		145,600	85,000		534,280	62,400	41,600	25,300	
Payroll Taxes	36,442		17,472	10,200		64,114	7,488	4,992	3,036	
Real Estate Taxes						24,377			-	
Repairs & Maintenance	5,000	3,000	12,000	2,500	2,500	25,000	30,000	2,500	2,500	
Utilities	6,000	800	3,600	3,500	4,800	18,700	6,000	600	1,500	
Supplies	4,500	12,000	15,000	1,500	1,000	34,000	2,500	1,500	800	
Miscellaneous	10,000	1,500	7,500	2,000	1,000	22,000	5,000	1,500	1,000	
Total Expenditures	\$ 365,622	\$ 17,300	\$ 201,172	\$ 104,700	\$ 9,300	\$ 961,471	\$ 113,388	\$ 52,692	\$ 34,136	\$ 431,216
Net Income before Taxes						\$ 113,392				\$ 481,784
Provision for Income Taxes						\$ 34,018				\$ 34,018
Net Income						\$ 79,375				\$ 481,784

Feasibility Study

Irvin Hotel & The MILL
Feasibility Study
April 16, 2016

	Irvin Hotel	The MILL
	Land Acquisition	\$ 100,000
SF	26,511	39,066
x Cost/SF	180	225
Construction Cost	4,771,980	8,789,850
Architectural Fee	190,879	351,594
Total Cost	\$ 5,062,859	\$ 9,166,444
Funding		
Mill Levy		\$ 5,760,000
Grants		1,000,000
Donations		800,000
Investors	\$ 3,150,000	
Loan Debt		
Local Bank	2,000,000	
Interest Rate	4%	
Bank of North Dakota		2,000,000
Interest Rate		1%
Total Funding	\$ 5,150,000	\$ 9,560,000

Irvin Hotel
Statement of Cash Flows
April 16, 2016

Net Income	\$ 79,375
Add: Depreciation Expense	122,500
Subtract: Loan Principal	115,151
Net Cash Flow	\$ 86,724

The MILL
Statement of Cash Flows
April 16, 2016

Net Income	\$ 481,784
Add: Depreciation Expense	-
Subtract: Loan Principal	434,500
Net Cash Flow	\$ 47,284

Design

The Irvin Hotel is located south of the town square marked by the maroon building outline. The MILL (center for social interaction) is marked by the light gray building outline located northwest of the town square. The Irvin Hotel has direct views of the Des Lacs Lake. The MILL is connected visually to the town square.

A pedestrian pathway, marked with light pink, leads residents and guests along the south facade of the Irvin Hotel connecting the Irvin Hotel to The MILL with little interference with vehicles. The pedestrian walkway connects to the scenic byway, a gravel road that travels along the Des Lacs Lake and connects back to Highway 52. The pedestrian pathway will be tied to the third phase of the Kenmare's walking path project which will be creating a pathway along Division Street.

Midblock connections have been initiated to emphasize the presence of the midblock paths within the town square that exist presently.



Figure 122.1 - Site Plan

April 21, 2015



Figure 123.1 - Irvin Hotel Wall Assembly

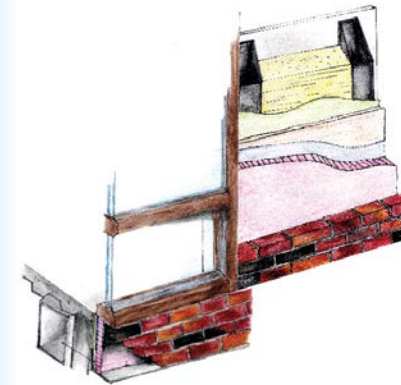


Figure 123.2 - The MILL Wall Assembly

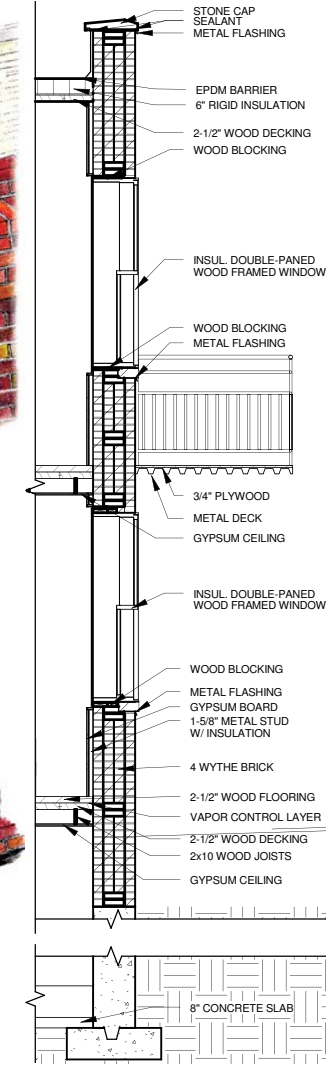


Figure 123.3 - Irvin Hotel Wall Detail

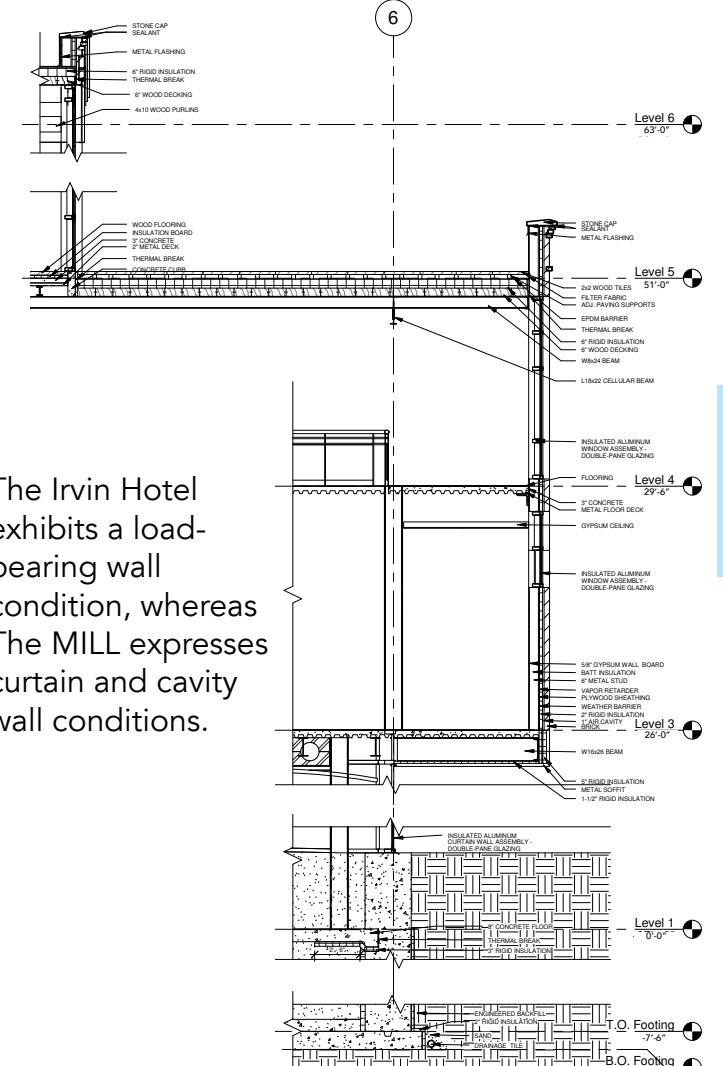


Figure 123.4 - The MILL Wall Detail

The Irvin Hotel exhibits a load-bearing wall condition, whereas The MILL expresses curtain and cavity wall conditions.

Design

Irvin Hotel

The Irvin Hotel has been transformed into a social neighborhood bringing a 24/7 presence to downtown Kenmare. Through mixed-use programming the abandoned hotel has been transformed into a public gathering space on the basement and first floor. Private residences are located on the second and third floor.

The Irvin Hotel has been preserved and rehabilitated. The exterior remains the same with plans to restore the brick, replace the existing windows with a wood Marvin replacement window, restore the four balconies, and add a 2-1/2" insulated metal stud wall on the interior to the exterior walls to increase the thermal efficiency of the building. The mechanical, electrical, and plumbing systems have all been updated. The only thing on the exterior that has changed was replacing the existing entry with a bronze aluminum curtain wall vestibule and an accessible ramp to enter the lobby.

On the interior the existing kitchen, dining, banquet room, lobby, and most of the first floor historic hotel spaces have been preserved. An elevator has been installed to make all floors accessible. Shared bathroom facilities have been



Figure 124.1 - Irvin Hotel approaching from the North created where two existing hotel rooms once were. The second floor has been transformed into apartment units dedicated for senior citizens to live independently with nurse assistance nearby. The third floor has been transformed into apartments for anyone to reside in.

Design details include a chair placed in the elevator for elderly to sit while they ride to their destination floor. Windows were placed in the hallway for the independent living and apartment units for a visual connection to the hallway as if it were a window to the exterior within a neighborhood.



Figure 125.1 - Irvin Hotel Floor Plans



Figure 126.1 - Banquet Room



Figure 126.2 - Lobby

The section perspective to the right exhibits the supply and return air distribution and load-bearing wall construction along with the wood-joisted floors. This view shows the layering of the mixed uses located within the building: the apartments layered above the lobby with the dining space below, and the first level of the owner's apartment over the banquet space.

A seating area was created to the North and South of the building to encourage residents and the public to enjoy the outdoors and take in the scenic views of the Des Lacs Lake to the South.



Figure 126.3 - Pedestrian Pathway South of the Irvin Hotel



Figure 127.1 - Irvin Hotel Section Perspective

Design **The MILL**

The name of The MILL pays homage to the Danish Mill landmark of Kenmare located in the center of the town square. MILL also stands for Movement, Interaction, Language, and Longevity.

The design of The MILL focused on creating an active, open, and welcoming space to encourage residents to interact with other members of the community.

The combination of brick and curtain wall express a connection to the past, when all of the buildings located downtown were constructed of brick from Kenmare's brickyard. The curtain wall expresses the future of construction with the steel framework behind and allowing more visibility from within and approaching.

The curves contrast the angles of the Irvin Hotel. Brick corbeling and soldier courses compliment the existing corbeling and soldier course located on the Irvin Hotel. The fifth floor where the venue space is located offers unobstructed views towards the Des Lacs Lake located to the South and West.



Figure 128.1 - The MILL Main Entry

The purpose of The MILL is to offer a place for people of all ages to gather whether by purpose or chance. The MILL offers a variety of activities: a venue space available for a wedding dance or business luncheon, swimming pool, therapeutic pool and sauna, outdoor hot tub, concessions, high-school regulation basketball court, aerobic space, walking track, and plenty of spaces for impromptu conversations, playing cards, or working on homework.

The MILL shows the residents of Kenmare their city is investing in the future of the residents, community, and longevity of the town.



Figure 129.1 - The MILL Floor Plans



Figure 130.1 - Looking East



Figure 130.2 - Looking South towards the Lake



Figure 130.3 - Swimming Pool



Figure 130.4 - Basketball Gym



Figure 131.1 - Venue Space during the Day



Figure 131.2 - Venue Space at Night



Figure 131.3 - Outdoor Patio off the Venue Space



Figure 131.4 - Outdoor Hot Tub



Figure 132.1 - Second Level Mezzanine



Figure 132.3 - Lobby

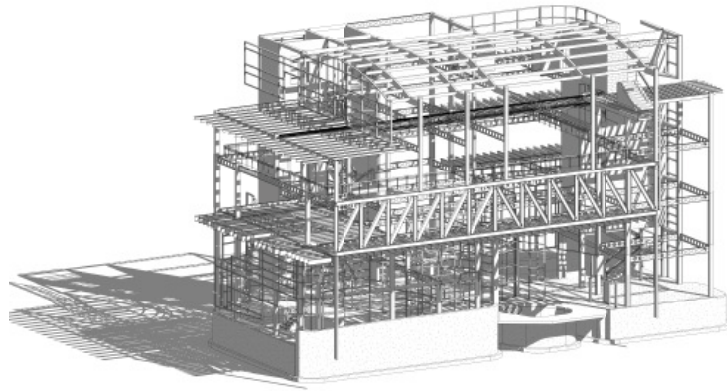


Figure 132.2 - Structural Model

The MILL expresses synergy through the hierarchy of structure. The box girder symbolized through the 12' truss supports the open bay of the basketball court representing the few that lead a small rural town. The beautiful curved glue-laminated beams represent the elders who once led the town and look over all the community members. The castellated beams and HSS columns represent all other community members because in a small rural town every member plays an important role in the town's survival.

The section perspective exhibits the supply and return air distribution.

This view shows how all of the spaces interact with one another and where interaction between neighbors may occur.

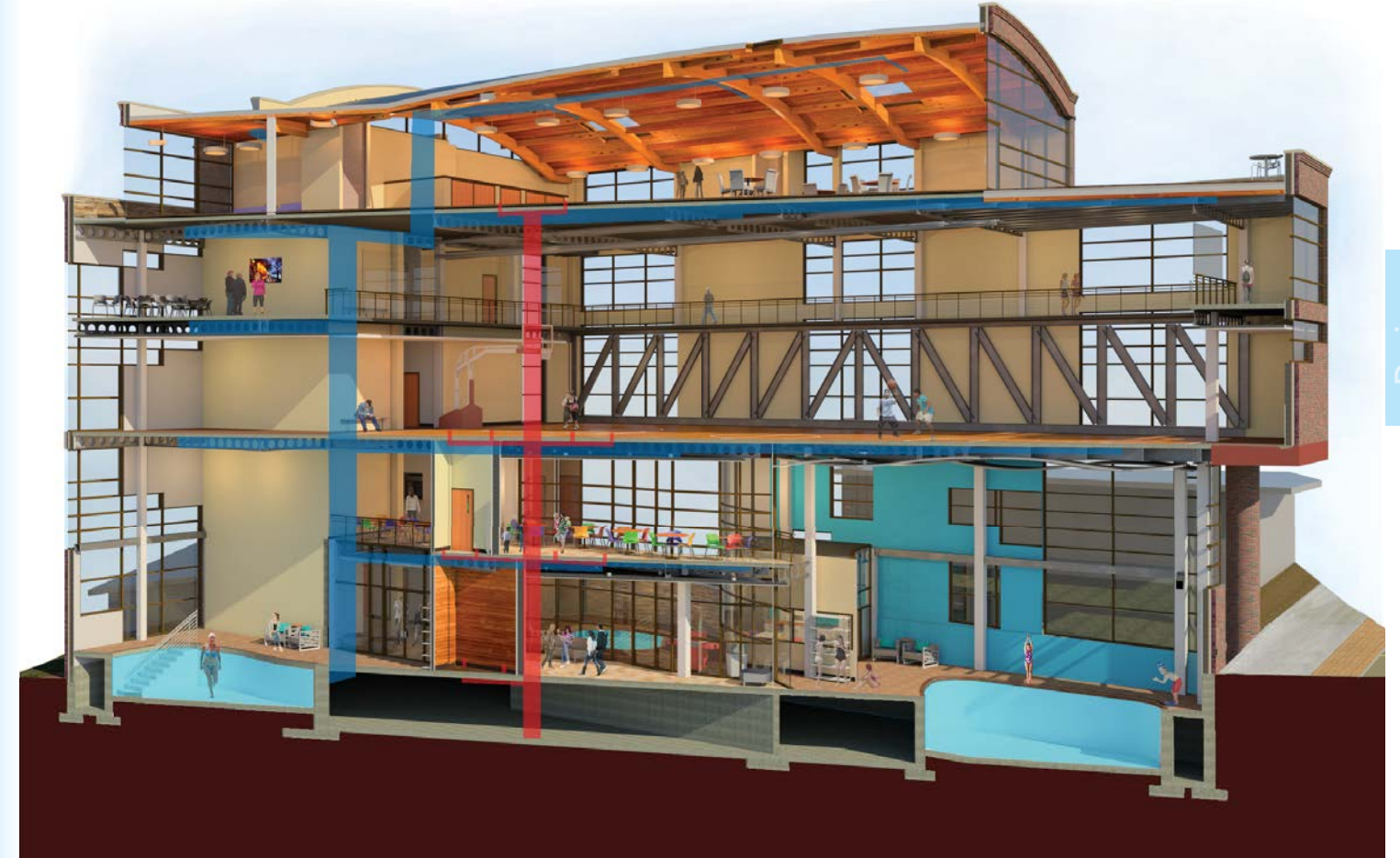


Figure 133.1 - The MILL Section Perspective

Renewing Rural Small Town Life: Intergenerational Interaction as a Key to Community

Site Model



Figure 134.1 - Site Model - Looking North

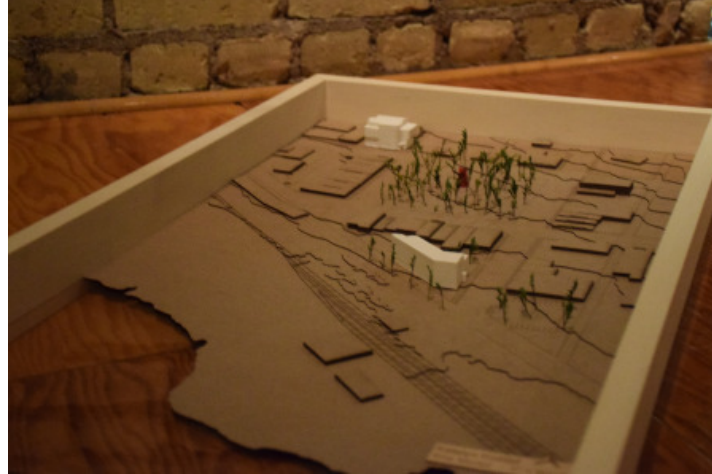


Figure 134.2 - Site Model



Figure 134.3 - Site Model



Figure 134.4 - Site Model

Thesis Exhibit



Figure 135.1 - Irvin Hotel

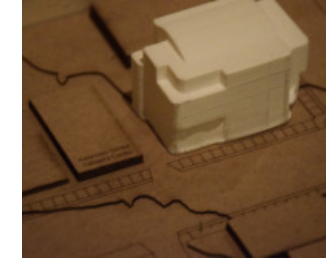


Figure 135.2 - The MILL

how would a rural community be renewed through reawakened development?



Figure 135.3 - Site Model - Looking South



Figure 135.4 - Final Thesis Exhibit

Last Thoughts

I believe small rural areas deserve well-designed architecture just like more populated urban areas do. This thesis revolves around giving back to a rural small town community proving that small rural areas are worth the investment.

The overall goal of this thesis is to promote and foster intergenerational interaction. Three ways have been developed through this thesis exploration to promote and foster interaction between generations of the community.

The first way is by prominently placing elderly downtown Kenmare, North Dakota. The second way is by breathing life into an abandoned historic building located downtown Kenmare. The third way is by creating a gathering place for the community offering a wide range of options for all ages.

Placing residential downtown for elderly in a setting that transitions from owning a home to apartment with assistance when needed allows them to remain active within their beloved community and promotes increased interaction with the community on a daily basis because

many necessities and services are within walking distance. Many who tend to remain socially engaged with friends, peers, and family versus becoming isolated and inactive maintain their health and tend to live longer because the social connections instill an increased responsibility to stay healthy.

Kenmare's history is preserved by rehabilitating the old Irvin Hotel. A time from long ago is reawakened for young and old to remember the early days of Kenmare.

The creation of the all age center provides an opportunity for community members to meet on neutral ground instead of a bar, restaurant, or one's home. By creating a place that allows people to gather indoors during the prolonged winter months, many seeking entertainment are able to stay close to home rather than travel 50 miles to a larger, more developed urban town.

The combination of these three initiatives foster interaction among generations, the young may learn from the elders about taking ownership of their community and sharing stories of the legacy

and traditions of the rural small town. I believe elders offer wisdom and necessary experience that would benefit younger generations, just as the younger generations offer a new perspective to the elders. Residents of a rural small town must realize their town is worth investing in and that it is their responsibility to take ownership within the town. Every member of a rural small community holds a crucial role in the town's survival.

I believe the programmed spaces of the Irvin Hotel and The MILL allow a community to become united through increased opportunities to interact with one another. The two programs done in conjunction will prevent elders from being isolated from the community and allows more opportunities for all members of the community, young and old to communicate and learn from one another.

How would a rural community be renewed through reawakened development?

This thesis focuses on renewing community spirit through architecture and reviving the quality of small town living.

The hope of small town living will be reawakened by investing within the rural small town community by providing opportunities that are not typical found in smaller towns. Community members will have renewed interest within the rural small town.

The community will be reconnected and united by prominently placing elderly in the downtown core promoting intergenerational interaction throughout.

This thesis sets out to prove the community of Kenmare, North Dakota is worth investing within for the future of its residents through new development and preservation of their town's history.

**"A concept is stronger
than a fact."**

- Charlotte P. Gillman

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Previous Studio Experience

Second Year

Fall 2012: Joan Vorderbruggen

Tea House: The intent of this project was to capture wabi-sabi and minimalism throughout the design of a tea garden and tea house. The setting was located in Island Park, Fargo, North Dakota.

Boat House: The project was a new home for the Minneapolis Rowing Club. The site was situated between the Mississippi River and a wooded hill area.

Spring 2013: Phil Stahl

Unconventional Dwelling: The intent was to draw inspiration from two items chosen for you: plant and animal. The dwelling must fit into two shipping cartons and be able to be transported and lived within anywhere in the world. i.e. desert, mountains, or within the city scape.

Dance Studio: Each of us were to choose a type of music to inspire our dance studio's overall form. The program included a performance stage and practice studios. The site was situated in an existing parking lot located in Moorhead, Minnesota.

Third Year

Fall 2013: Steve Martens

Wildlife Rehabilitation Center: Inspiration derived from choosing a wild animal and designing for the landscape and site where that animal habitats. The site was located in a relatively flat open area located within a wooded area outside of Bayfield, Wisconsin.

Wellness Spa: This project focused on embracing a specific type of masonry material and the site where the material was made. My design featured the use of Hebron Brick and was located in Hebron, ND. The design incorporated a holistic wellness spa and six dwelling units.

Spring 2014: Bakr Aly Ahmed

Culinary Arts School: This project encompassed culinary education with a student run bakery, coffee, cafe, and restaurant open to the public. The school was designed to infill an urban site located downtown Fargo, ND.

Border Crossing Station: This project focused on the use of steel in artistic forms for the ACSA/AISC Competition. I chose to locate the project along the Finalnd and Russia border.

April 21, 2015

Fourth Year

Fall 2014: David Crutchfield

High Rise: The project encompassed an urban infill site located in San Francisco, California. The design solution was mixed-use featuring hotel, residential, restaurant, retail, grocery, leasable office space, and two levels of subterranean parking.

Spring 2015: Steve Martens

Historic Preservation: Babcock Hall is one of the oldest buildings on University of North Dakota's campus located in Grand Forks, North Dakota. I chose to give this building new life and adapted the building to suit either the Orin G. Libby archive collection or Department of Anthropology.

Fifth Year

Fall 2015: Mark Barnhouse

Wetlands Research Laboratory: The site is located on the prairie west of Ulen and north of Hawley, Minnesota. The design complimented the horizontal prairie and natural curves within the landscape.

“The starting point of all achievement is desire.”

- Napoleon Hill



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Figure 153.1 - personal photo