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YWCA

# Young Women's Christian Association: A Home to Run to

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A home to run to



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Thesis 2004-2005

Arch.  
Thesis  
2005  
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A Home to Run to

YWCA Shelter Complex for  
Fargo, Dakota

A Design Thesis Submitted to the  
Department of Architecture and Landscape Architecture  
Of North Dakota State University

By

Reggi Helling

In Partial Fulfillment of the Requirements  
For the Degree of  
Bachelor of Architecture

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May 2005  
Fargo, North Dakota



# YWCA SHELTER - FARGO, NORTH DAKOTA

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**YWCA SHELTER - FARGO, NORTH DAKOTA**

PROJECT INTRODUCTION

Project Introduction  
**Project Introduction**

# **YWCA SHELTER - FARGO, NORTH DAKOTA**

The purpose of this thesis project is to create a place for the Young Women's Christian Association to provide assistance to troubled women and children in the Fargo area and surrounding communities.

This project will combine the needs of the YWCA with the design solutions used by the Modern Movement era to create a facility that is both functional and comfortable.

The new YWCA complex will focus on the healing needs of the environment by incorporating natural ventilation and sunlight in all spaces.

**YWCA SHELTER - FARGO, NORTH DAKOTA**

**THEORETICAL PREMISE**

Theoretical Premise

# Theoretical Premise

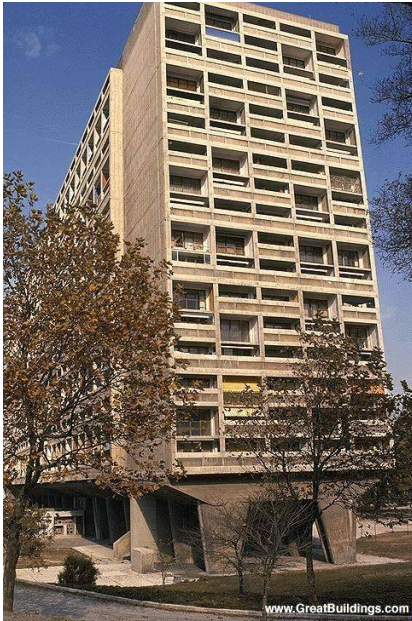


## YWCA SHELTER - FARGO, NORTH DAKOTA

The theoretical premise for the YWCA shelter design is to use the same concepts that the modern movement used to create affordable, functional housing and adapt them for use in a shelter setting.

### Modern Concepts

The Modern Movement picked up steam after World War I ended in 1918 when cities began to rebuild. The reconstruction started with the most essential buildings, which were housing projects, schools, and factories (Richards, 1962, p. 115).



Unite d'Habitation  
Le Corbusier

The Modern Movement is a broad style although there are a few common ideas that identify the style. One unifying idea of the Modern Movement was that the traditional forms of architecture, the ways of living, and the materials that were being used, were outdated and needed to be reconsidered completely. The goal was to look to the future instead of relying on the past. Those looking to the Modern Movement for the changing problems of the day thought that the solution would be 'universal, democratic, functional, economical and beautiful, and would presumably last forever' (Sutton, 1999, 318). Another unifying idea was that the house should be built to serve the occupants. The layouts were efficient and functional and focused on the needs of the clients.

The post-war conditions allowed the Modern Movement to grow considerably. Countries that had been affected by the war were beginning 'complete economic and industrial reconstruction'. The lack of funds of the time also called for 'strict regard for what was necessary and practical' (Richards, 1962, 77).

## YWCA SHELTER - FARGO, NORTH DAKOTA



Putting aside the traditional during the early stages of the Modern Movement often created 'bizarre and unpredictable effects' that were shocking to the public (Wikipedia Encyclopedia, Modernism). The new designs focused on simplicity and clarity of form, open floor plans, and the absence of clutter of both furniture and ornamentation.

When modern building design started, not everybody was pleased with its appearance. It was because of the simplicity that the style was criticized for being stark and cold looking. When compared to the highly ornamented building types of the time, the modern style is quite bare. Whether the style should be criticized for being too daring for the times or commended for the introduction of the clean, rational, and efficient designs is a matter of opinion.



Weissenhof Row Houses  
J.J.P Oud

These clean lines and lack of this handcrafted ornamentation evolved from the advances in machinery. When responding to the housing crisis, the ability to put residences up quickly was an advantage. The use of pre-made windows, doors, beams, and fixtures helped to make the building process quicker. Continuing to make every piece of a house by hand was becoming an outdated practice as prefabrication began to take over. Today, walls and whole houses can also be prefabricated and shipped complete to a site. Prefabrication improves efficiency in building by cutting down on building time and improves quality because of the enclosed factory setting that the units are built in.

Two of the most important materials to the Modern Movement were reinforced concrete and structural steel. Longer spans between columns and larger window openings were now able to be created. Structural steel also

## YWCA SHELTER - FARGO, NORTH DAKOTA

assisted in the open floor plan. Columns could be moved into the interior to support the building and a curtain wall constructed for the skin to keep out the elements. It was because of this new ability to use creative floor plans that the flat roof gained popularity with Modern Movement buildings. Flat roofs were preferred because pitched roofs would have created difficult valleys as the odd shaped floor plans came together.

### Conclusion

It is hard to tell what exactly led to the decline of the Modern Movement. It was more likely that it was a combination of a few factors rather than one single situation. Steel and timber became very expensive building materials increasing the cost of having long-spanning, open rooms. Modernism became associated with the demolition of many housing structures in attempt to rebuild better and more efficient. The better and more efficient replacements were not always seen that way by the public after the reconstruction, which brings up another factor that likely has to do with the decline of the style, the lack of familiarity. Habit had associated beauty with the traditional, familiar forms that were not seen in the new style. The present styles and forms of today would be more accepting of 'unusual' of yesterday.



The YWCA faces some of the same types of issues that the government faced after the war. The prefabrication methods that were used to quickly and efficiently build houses then have been refined and used more and more today. The YWCA can use low cost construction methods, like the Modern Movement attempted to do, to keep the building on budget and provide low income housing.

**YWCA SHELTER - FARGO, NORTH DAKOTA**

HISTORY

# History History

## **YWCA SHELTER - FARGO, NORTH DAKOTA**

The YWCA was originally formed in 1858 with the goal of empowering woman and eliminating racism. Since the first established YWCA, the organization has expanded to about 300 communities across the nation. It is considered a safe-haven for women and children to come to during troubled times. The YWCA provides many programs built around the basis that all people deserve to be respected, to have shelter, to be free, and to live in peace. The YWCA offers shelter for those who don't have any other place to go, counseling for abuse and rape, and education in job training and personal health and safety. In 1910, the YWCA started community programs in Fargo, North Dakota and in 1977, shelter services where added. The YWCA in Fargo now operates the largest shelter in North Dakota and northwest Minnesota. There were 882 women and children taken in at the shelter during 2001 alone. The largest percentages of people who come to the shelter are leaving an abusive relationship.

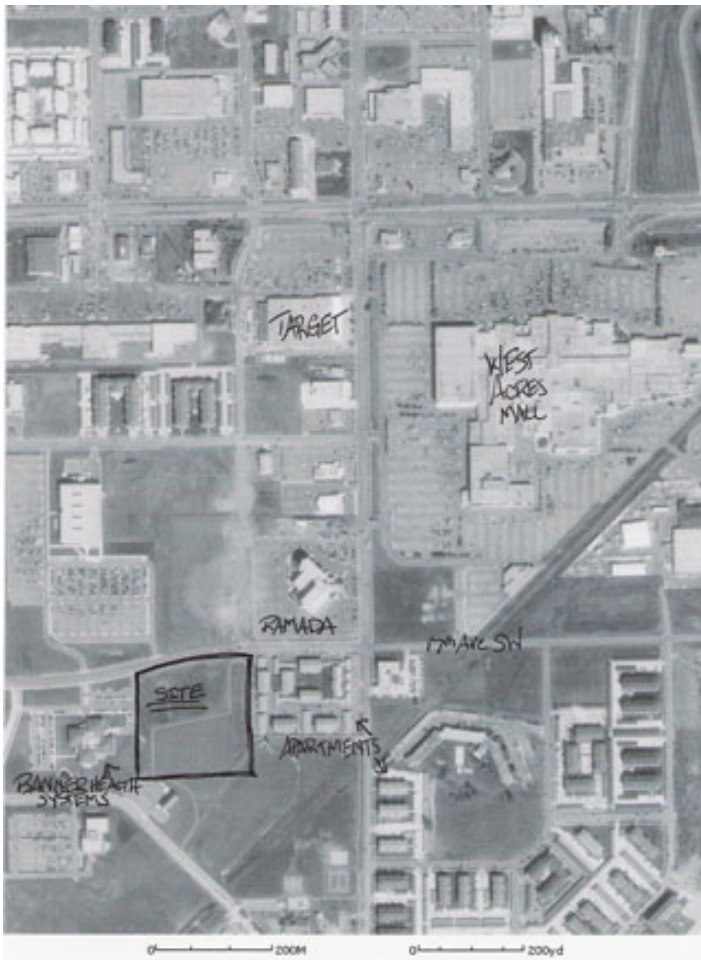
Site analysis  
**Site analysis**



# YWCA SHELTER - FARGO, NORTH DAKOTA

## SITE

The site is an empty lot in south Fargo, North Dakota. It is located at the 17<sup>th</sup> Avenue Southwest and 43<sup>rd</sup> Street block. The former Banner Health Systems building located to the west is the closest built structure to the site and is now vacant. To the north of the site are three-story apartment buildings and the U.S. Bank building. The Ramada hotel is northeast of the site along with more three-story apartment buildings to the east. South of the site is the Young Men's Christian Association building. This building houses a fitness facility along with a daycare and children's activities. The close proximity of this facility is a great benefit to this site for the YWCA.



## **YWCA SHELTER - FARGO, NORTH DAKOTA**

The surrounding buildings are all relatively low structures with only a few stories. The exception to this is the Ramada which is a 7-8 story structure. The lot is between commercial areas and residential areas making the site a good location for fitting the facility into the context of the surroundings.

The site is very flat with a slight slope down to the parking lot located on the west. This low area has evidence of water collecting here. An existing sidewalk currently splits the open lots into two. The sidewalk can be relocated since the building that it leads to on the west is now vacant. Very young trees are growing on the site and as many as possible should be kept with consideration for their growth in the future.

The primary wind direction in Fargo is from the north. This presents a problem as the site is completely unprotected along the north side. The north side will also be where traffic is coming into the site from 17<sup>th</sup> Avenue Southwest. Privacy from the passing traffic will also be an issue that needs to be resolved.



# YWCA SHELTER - FARGO, NORTH DAKOTA

## Traffic and Site Analysis

### Traffic

- ↪ 17th Avenue SW
- ↪ Site entrance on the north

### Topography

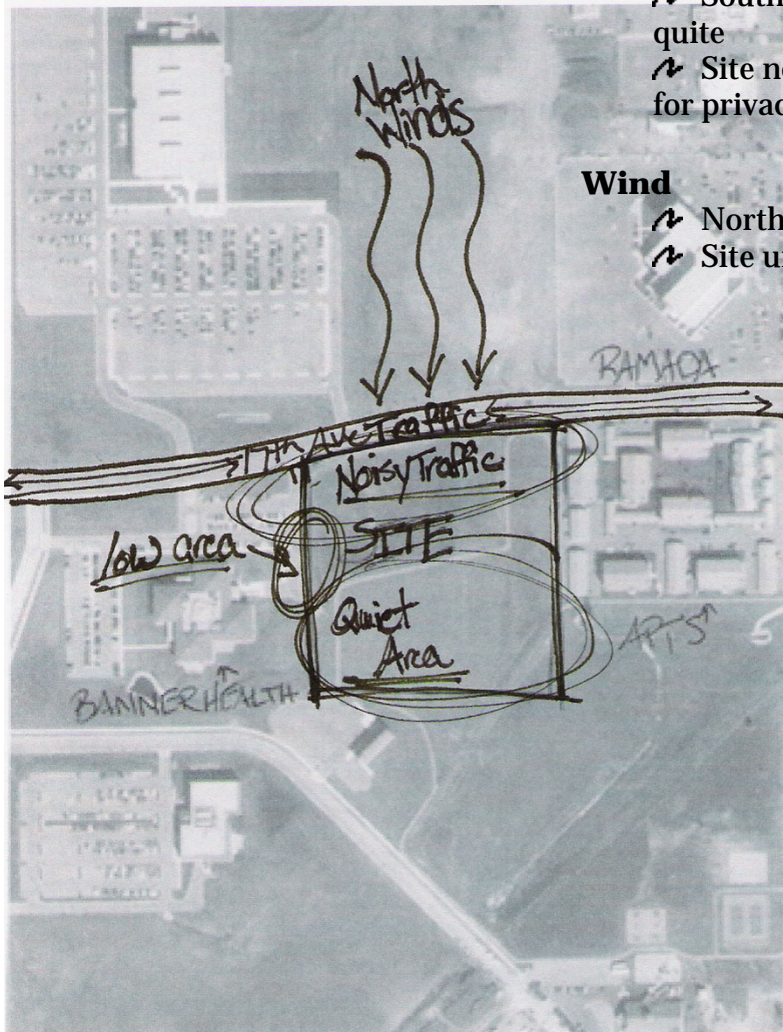
- ↪ Slight down slope to the west
- ↪ Collects water on west side
- ↪ Will need to be filled in or avoided for outdoor activity

### Privacy

- ↪ North side of site noisy
- ↪ South side of site more private and quite
- ↪ Site needs to be sheltered on north for privacy and climate

### Wind

- ↪ Northern winds
- ↪ Site unprotected on north side



# YWCA SHELTER - FARGO, NORTH DAKOTA

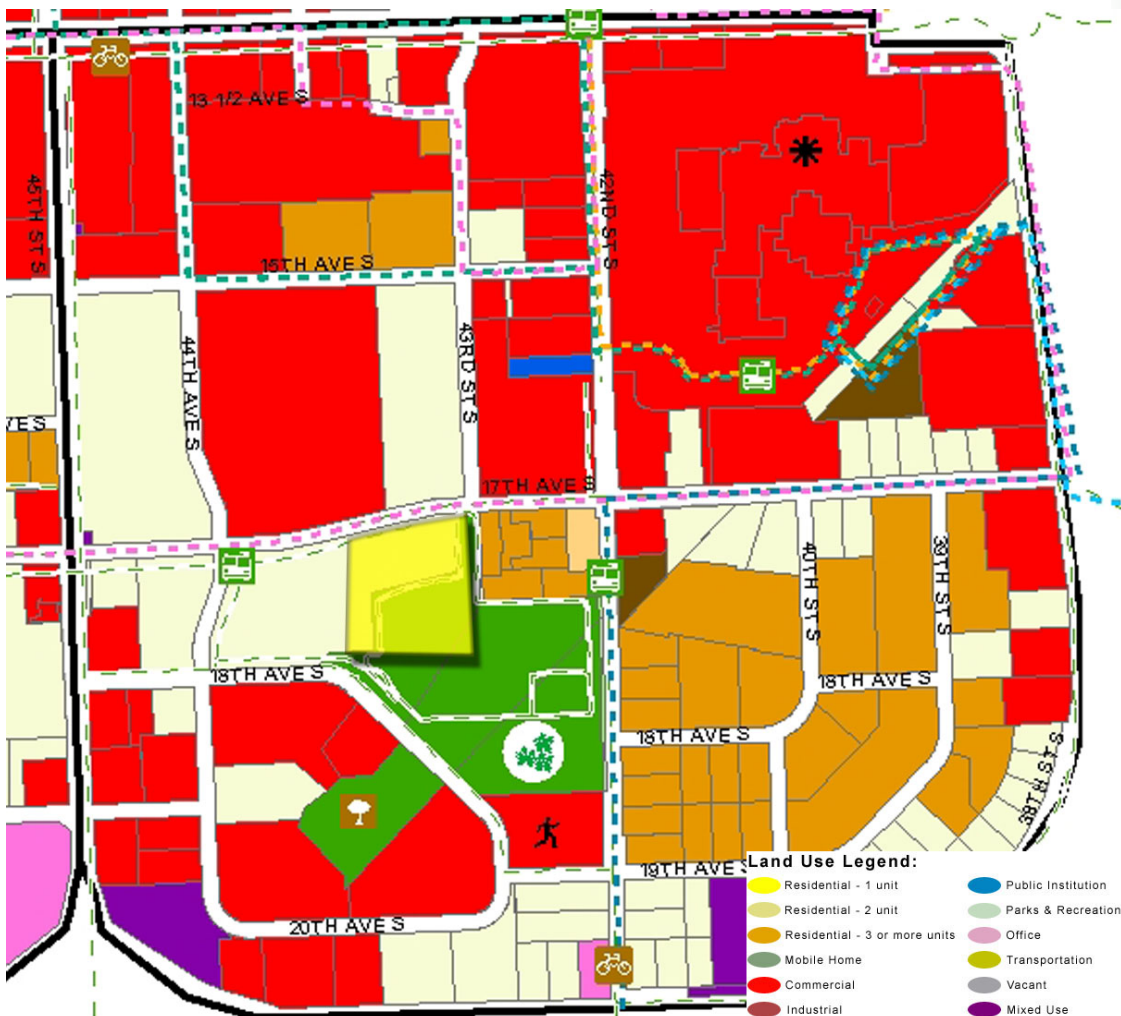
## Area Land Use Map

### Land Use

- ↗ Predominantly Commercial - Red
- ↗ 3 or More Units: Residential- Orange
- ↗ Open Land- Green

### Location

- ↗ easy to blend a shelter into the existing land use between the commercial and residential area
- ↗ easy access to shopping and potential employers

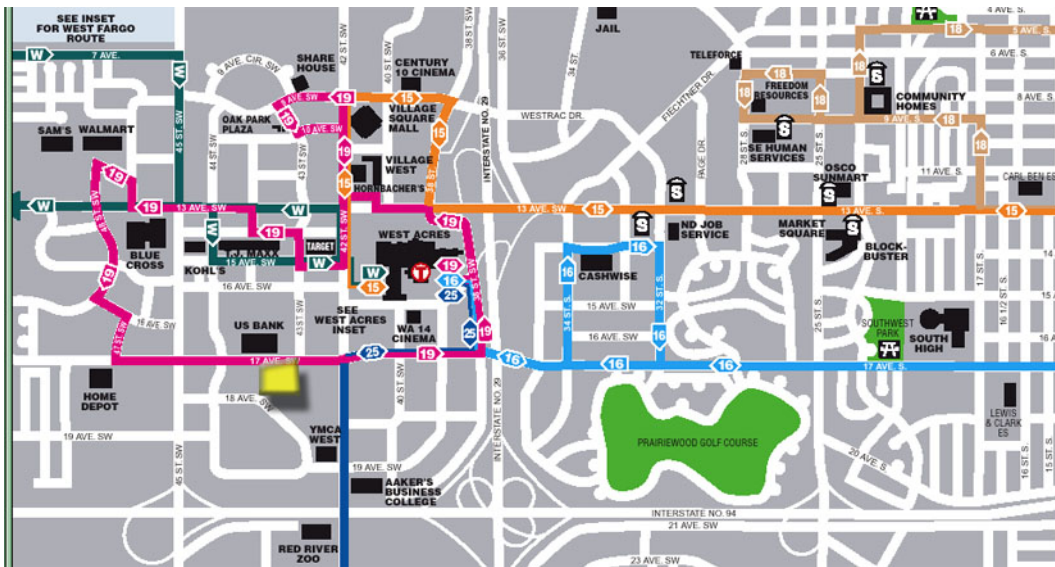


SITE ANALYSIS

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Area Bus Routes

- ↗ Close to local bus routes
- ↗ Easy transportation choice
- ↗ Close to many route choices
- ↗ Minimizes need for resident to have their own transportation
- ↗ Possibility of bus rerouting to stop at the site



# YWCA SHELTER - FARGO, NORTH DAKOTA

## Climate Data for Fargo

### Solar Orientation

Fargo is located at 46.9 degrees latitude. At this location, sun exposure in the winter is drastically reduced. The maximum sunlight is during the months of May, June and July with the first measurable foot-candles starting at 6am and ending at 7 and 8pm. December has the shortest daylight availability with measurable foot-candles starting at 9am and ending about 5pm. (Brown, DeKay, 2001, p 321) Bringing sunlight into the interior will be a design concern in the winter.

### Average Wind Direction



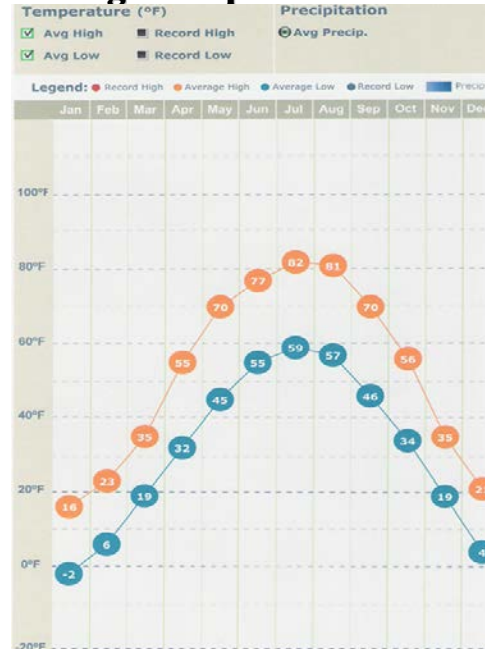
### Average Wind Speed

Month	Bismarck			Devils Lake			Fargo		
	Mean Speed	Prevailing direction	Fastest Mile	Mean Speed	Prevailing direction	Fastest Mile	Mean Speed	Prevailing direction	Fastest Mile
January	10.2	WNW	54	9.7	NW	41	13.2	SSE	62
February	10.2	WNW	54	9.9	NW	54	13.0	N	56
March	11.4	WNW	65	10.6	NW	54	13.6	N	56
April	12.8	WNW	63	11.3	NW	47	14.9	N	68
May	12.5	SSE	66	10.7	NE	52	13.8	N	72
June	11.3	WNW	66	9.5	SE	50	12.2	SSE	115
July	9.8	SSE	72	8.4	NW	56	10.9	S	60
August	10.0	E	72	8.5	SE	47	11.4	SSE	71
September	10.5	WNW	66	9.3	NW	46	12.5	SSE	88
October	10.4	WNW	61	9.9	NW	47	13.1	SSE	57
November	10.6	WNW	67	10.1	NW	57	13.7	S	66
December	9.8	WNW	61	9.3	NW	42	12.8	S	58
Year	10.8	WNW	72	9.8	NW	57	12.9	N	115
Yrs. of	30	14	30	57	57	57	28	14	29



# YWCA SHELTER - FARGO, NORTH DAKOTA

## Average Temperature



## Average Rainfall



## Conclusion

The severe winter weather will require special attention to the site to try to maximize the usability of the outdoor spaces for fresh air.

Drainage on the site needs to be addressed. Currently the summer rainfall and winter melting collects on west side of the site. The rest of the site is very flat and water will have to be directed away from any built features that are to be placed on the site.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Site Pictures



North



Ramada



Apartments

East



Apartments



YMCA

South



West



Banner Health Systems

SITE ANALYSIS

Case Studies  
Case Studies

## YWCA SHELTER - FARGO, NORTH DAKOTA

### **Charles County Crisis and Referral Center Waldorf, Maryland**

The Charles County Crisis and Referral Center is designed to convey the image of a residence rather than a institution creating a more inviting space and one that is less intrusive to the neighborhood.

The shelter complex is built on 3.5 acres of woodland. Spaces include staff and counseling offices, community spaces, residential places, daycare facility and a large amount of storage.

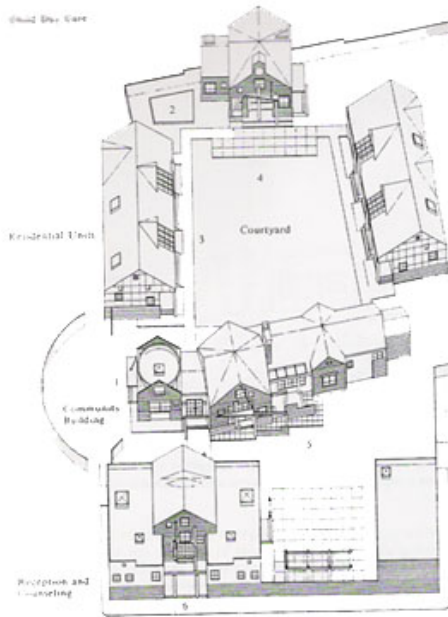
Public spaces look outside to the community and private spaces look to the inside to the private courtyards. Transitional spaces are created by using outdoor squares that also act as extensions of the interior spaces.



1. Outdoor Refuge
2. Visual Buffers
3. Environmental Sound Control
4. Site Security
5. Protected Public Parking
6. Serialized Entry
7. Direct Access to Community



# YWCA SHELTER - FARGO, NORTH DAKOTA



1. Public to Private Gradient
2. Outdoor Play Area
3. Semi-Private Entrance
4. Interior Courtyard
5. Imagery
6. Secure Entry

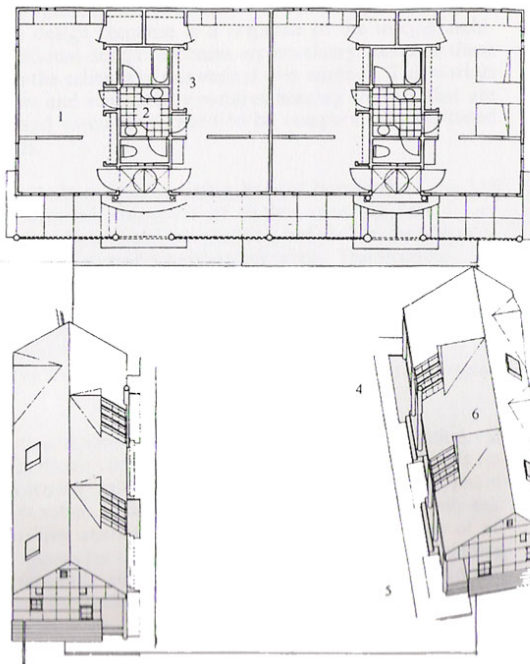
A sense of having a wall surrounding the complex is implied in some areas using the landscape. The surrounding 'wall' provides a sense of security and of community within the complex. Reception and administrative offices are placed at the front of the public entrance to serve as a 'gate' inside the building to protect the residence. The progression into the complex is further enhanced by the change in materials from public to private spaces as one moves from the sidewalk to the exterior spaces and then into the building.

Off the formal, secure entrance is the community building. Vestibules are positioned at the entrance to the building for a transition to the inside. The building itself also serves as a transition by its placement between the more public and the more private buildings. The space is designed like a oversized living room with areas of different scale, such as small alcoves, to allow for privacy or large open areas with vaulted ceilings for gatherings.

Large windows look out onto courtyard areas for a feeling of connection to the outdoor space. These windows also provide mothers with a clear view of their children playing outdoors. The courtyard provides an interior focus of the complex and connects major elements of the shelter.

# YWCA SHELTER - FARGO, NORTH DAKOTA

The residential areas create a sense of ownership and belonging by giving the residence a space of their own but keeping it in connection with the rest of the complex. The spaces are zoned from the living room just off the courtyard back to the private bedrooms and bathroom. The bedrooms are large enough to accommodate two double beds or a bunk bed with a storage wall and a chest of drawers. The bathroom serves two residence areas and has a separated toilet and shower areas to allow more than one person to use the room at a time.



1. Partitions
2. Bathrooms
3. Bedrooms
4. Views
5. Reinforcement
6. Sound Control

The daycare is designed to be a flexible space that can change for the needs of the facility. There is room for childcare, play, education and counseling as well as ample storage.

## Conclusion

The Charles County Crisis and Referral Center has the components and layout that make it a good example for the YWCA shelter. The layout of the shelter creates the public and private spaces needed both in physical features and change in materials. The obstacle that will have to be dealt with in the YWCA shelter is the open land around the site. This can work well for clear site lines to see who is approaching the shelter but works against creating a sense of privacy inside the building. The Crisis Center in the case study overcomes the privacy issue by it's location in a wooded area.

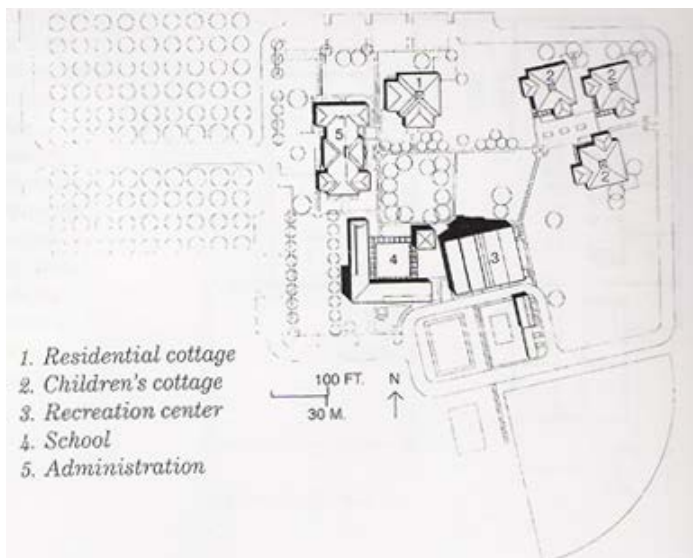
## YWCA SHELTER - FARGO, NORTH DAKOTA

### **Casa Pacifica Children's Crisis Care Center California**



The child care center in Ventura County, California provides shelter for children that have been abused or that have behavioral problems. The shelter is temporary while they wait for a more permanent home. The architects of the shelter wanted to use the agricultural setting in the design. They chose to follow a ranch theme in the look and layouts of the buildings. The goal for the design of the shelter 'was to create a sanctuary for the abused children who were psychologically disturbed, a very non-threatening setting' (Safe House, 1995, p. 86).

The buildings on the 22-acre complex resemble a ranch in the use of the materials and orientation of the buildings. Redwood siding and tiled roofs were used and the buildings were slightly rotated from one another as if they had been built at different times.



## YWCA SHELTER - FARGO, NORTH DAKOTA

The residential buildings are designed to look like cottages and are arranged around a central living space. This allows the children to feel like they have a little privacy but they can still be observed for their safety.

The average stay of a child at the shelter is 50 days and the capacity is 45 children. The facility also has the capacity to house 28 more children that are undergoing a more extensive program that requires them to stay 18 months. To increase the capacity later, all the shelter has to do is build more 'cottages'.



1. Bedrooms
2. Day room
3. Dining room
4. Kitchen
5. Office
6. Mechanical
7. Bedrooms
8. Day room
9. Kitchen
10. Play area
11. Bathing
12. Nursery
13. Office
14. Mechanical



### Conclusion

Since the Children's Crisis Shelter is for children only, this shelter example is missing some components that the YWCA needs in its shelter but still has the main residential spaces needed. The concept of creating a sanctuary and having the children work on the ranch-type site to create a sense of ownership is worth noting. Trying to achieve this in an urban setting will be an interesting challenge but will greatly benefit both the women and children using the shelter.



## YWCA SHELTER - FARGO, NORTH DAKOTA



### **Berkeley Street Project Santa Monica, California**

Program:  
Seven 2-3 bedroom (752-892)  
units  
Subterranean parking  
Cost \$393,994

CASE STUDIES

The goal of the Berkeley Street project is to blend low-income housing in with the surrounding housing developments to help to eliminate the Not-In-My-Backyard syndrome. After the first housing unit was built, another section of Berkeley Street was chosen for more low-income housing that would replace affordable housing that had been torn down for a hospital expansion. The new housing avoids the repetitive, unappealing look of typical low-income units by using color, light, and space with a minimum amount of ornament to create individual units.



### **Conclusion**

The Modern look of the project works well with theoretical premises for the YWCA. The look of the building would have to be adapted slightly to fit into the Fargo context. Creating individuality in the units is a good concept, as is the underground parking for the safety of the YWCA residents. The design should incorporate both of these from this case study.

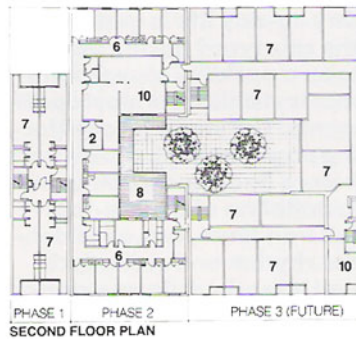
# YWCA SHELTER - FARGO, NORTH DAKOTA

## St. James Social Services Four Sisters Vancouver



Program:  
Studio and 1 bedroom units  
(450-850 sq ft)  
Social Services Offices  
Commercial

Cost \$873,327



- 1 COMMERCIAL
- 2 SOCIAL SERVICES OFFICES
- 3 WORKSHOPS
- 4 RESIDENTIAL ENTRY
- 5 HOME HELP OFFICES
- 6 EMERGENCY SHELTER
- 7 APARTMENTS
- 8 DECK
- 9 PARKING
- 10 AVENITIES ROOM

This shelter in Vancouver is an infill project that replaced two buildings that were torn down in the retail district of town. The project addresses social problems that are faced by the city by providing them space in the building organized by floors. The street-level floor consists of the social workers offices, community workshop areas and a public laundry facility. The second floor contains an emergency shelter for women and children and the third floor provides longer term accommodations for transition housing.

### Conclusion

The shelter blends well with the existing commercial structures surrounding it and organizing the users by level is a good feature of this building. For the YWCA, creating a building that blends in with the surrounding housing will be important and a design that separates users by level is an option.

**YWCA SHELTER - FARGO, NORTH DAKOTA**

CHILDCARE RESEARCH

# Childcare Research

## Childcare Research

### **Child Care Centers**

Children have four basic needs in a childcare facility; to have an environment that encourages movement, supports comfort, fosters competence, and encourages a sense of self-control.

‘Movement is considered to be the bedrock of all intellectual development’. (Olds, 2001, 9) Children are less frustrated when allowed to play using large motor skills such as climbing, sliding and swinging. Providing opportunities for these types of activity will help reduce behavior problems such as fidgeting and hyperactivity.

Children feel most comfortable when there is a moderate level of stimulation. Behavior is sometimes undesirable when stimulation is either too high or too low. The reaction to both extremes looks the same and can be hard to distinguish whether it is from too much or too little stimulation. Anita Rui Olds states that the environment usually encountered in childcare facilities can make children uncomfortable, such as long corridors; cold tile floors; glaring fluorescent lights; and chaotic patterns of vibrant color everywhere. ‘Difference within sameness’ is a concept that is expressed by Olds in creating an environment that tries to create stimulation without over doing it. Some of the ideas for providing this ‘difference within sameness’ are varying the floor height, ceiling height, lighting, and textures. Developing spaces that can suit different levels of arousal at different times is key to preventing boredom.

Children need to feel that they can be successful in doing simple things for themselves. Small things such as lowering light switches, making knobs easy to turn and furniture their size can make a big difference to the child.



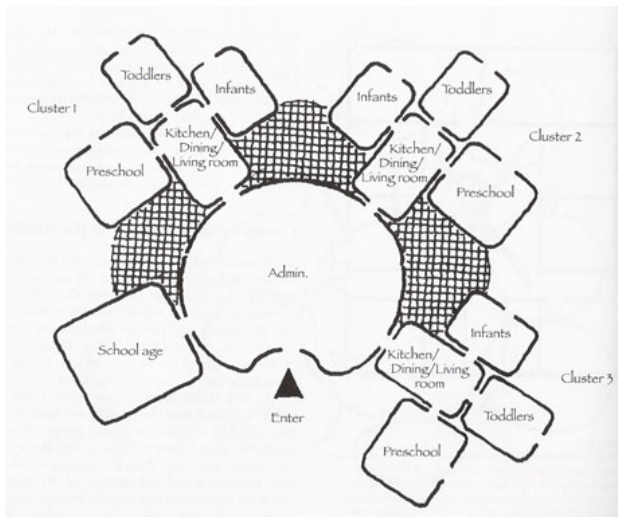
## **YWCA SHELTER - FARGO, NORTH DAKOTA**

Providing an environment that creates a sense of control is critical for a child to assess their surroundings and make choices for themselves. Having a sense of control over their environment is especially important for children that have been victims of a tragic home life. Children need to be able to have their privacy when they want but adults still need to be able to watch them. Children that have been abused often hide and large open spaces will be very uncomfortable for them. Predictability is another factor that gives children a sense of control over the space. A loft space is good for seeing the spaces from a higher vantage point than a small child would normally have. Low windows, both interior and exterior, help answer curiosities about what is beyond the room that they are in.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Guidelines- Child Care

A layout resembling a residential core is one way of organizing spaces within the facility. Rooms are situated around a kitchen or living room type layout to bring people together into that space.

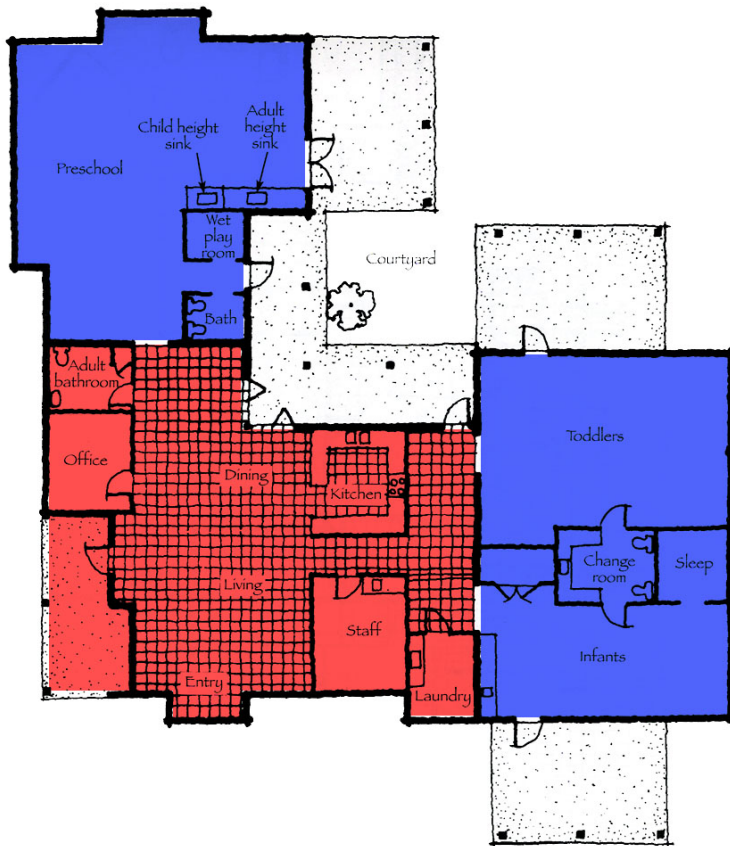


There are many advantages to the residential core layout:

- Children and teachers interact with each other more
- Transitions from classroom to classroom are less traumatizing
- Children of the same family are still able to see each other

# YWCA SHELTER - FARGO, NORTH DAKOTA

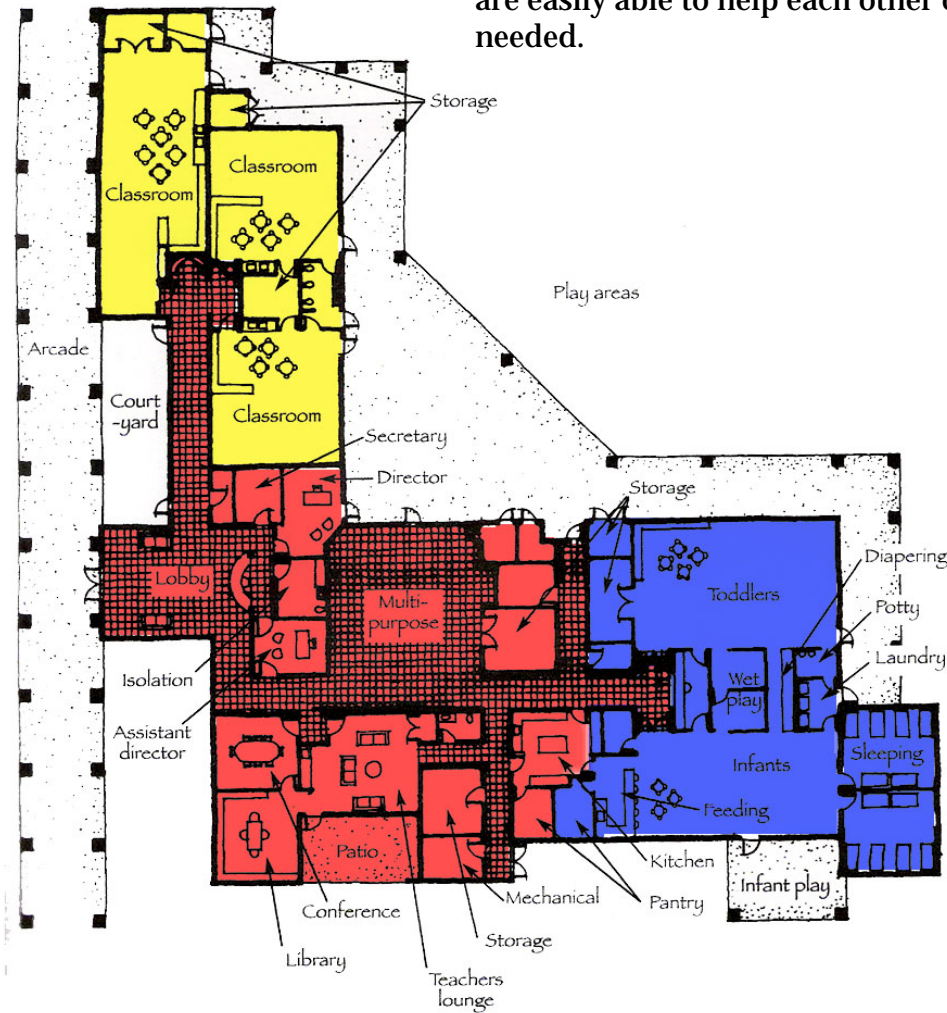
The floor plan below shows an example of a residential core layout. The layout consists of two wings of childcare spaces connected by the functional spaces such as the living space and the kitchen space.



# YWCA SHELTER - FARGO, NORTH DAKOTA

The sample floor plan shown below will be the most useful example for a design that will work for the YWCA shelter. The layout includes classrooms that the program needs. The connection of both the classrooms and childcare spaces by the common space is a desirable layout.

The number and age of the children using the facility will change often requiring the employees and spaces to be flexible. By placing the classrooms and daycare in close proximity, the daycare workers and teachers are easily able to help each other out when needed.



# YWCA SHELTER - FARGO, NORTH DAKOTA

## Space Guidelines- Child Care

Cramped play areas (1+ child/30 square feet) can produce aggression while too much open area (1+ child/50-55 square feet) can lead to less social interaction. The amount of square footage, as recommended in The Child Care Design Guide, is 42 square feet/child minimum for the activity area. The total area recommended for a facility is 100-115 square feet/child minimum.

Determining Building Size					
Space Standard (Quality)	Primary Activity Space in Each Group Room	Second Activity Space in Each Group Room *,**	Adult & Common Space (Outside the Group Rooms)	Tertiary (Nonassignable Space)	Total Building Square Footage
Minimum (Insufficient)	35 sq ft/child	20 sq ft/child	15 sq ft/child	17.5 sq ft/child (25%)	88 sq ft/child
Workable	42 sq ft/child	20 sq ft/child	18 sq ft/child	20 sq ft/child (25%)	100 sq ft/child
Better	46 sq ft/child	20 sq ft/child	22 sq ft/child	26 sq ft/child (30%)	115 sq ft/child
Recommended	50 sq ft/child	20 sq ft/child	24 sq ft/child	29 sq ft/child (30%)	125 sq ft/child

\* In infant rooms, an additional 30 sq ft/child is needed to each crib and the 2-3 foot clearance between adjacent cribs.

\*\* Because toddlers need both diapering and toileting, an additional 3 sq ft/child are desirable.

## **Conclusion**

Special considerations are crucial in designing spaces for the children who will be living at the shelter for various reasons. The children are often victims of violence and abuse and they need to feel that the shelter is a safe and comforting place.

Specific elements of the building design can help to create a comforting atmosphere for the children. Fixtures and furniture should be at a child's level, color choice should be carefully considered to create the emotional response desired for the space, and space layouts should resemble those of a home to eliminate an institutional feeling.

The goal for the childcare spaces is to create a homelike environment for the children to feel safe while they live at the shelter.

## YWCA SHELTER - FARGO, NORTH DAKOTA

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## **YWCA SHELTER - FARGO, NORTH DAKOTA**

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**YWCA SHELTER - FARGO, NORTH DAKOTA**

PROGRAM GUIDELINES

Program Guidelines  
**Program Guidelines**

## CONCEPT GUIDELINES

### **Functional**

In spaces and materials

- ↪ User friendly layouts
- ↪ Durable materials

### **Efficient**

In Materials

- ↪ Use whole materials to reduce waste & cutting time

In Construction

- ↪ Use prefabrication

### **Healthy**

In Use of Windows

- ↪ Use windows to maximize sunlight and natural ventilation

### **Supportive**

In Community Interaction

- ↪ Create common spaces for people to interact
- ↪ Create pedestrian path design that links all spaces of the complex

In On-site Assistance

- ↪ Provide easy access to counseling, daycare and classes

### **Cost Effective**

Spaces

- ↪ Versatility in room usage
- ↪ Eliminate spaces that will go unused

## DESIGN GUIDELINES

### **Safe**

Residence must BE safe:

- ↗ Secured entry
- ↗ 24 hour surveillance
- ↗ Clear sightlines off site

Residence must FEEL safe:

- ↗ Smaller cozy feeling spaces
- ↗ Visual screens to allow for sight out but not in
- ↗ Adequate lighting on site
- ↗ Protected parking spaces to be sheltered from view
- ↗ Sound control for counseling rooms

### **Healthy**

Sunlight

- ↗ Large windows
- ↗ Skylights

Ventilation

- ↗ Operable windows
- ↗ Outdoor Spaces

### **Affordable**

To Build

- ↗ Use of prefabricated materials
- ↗ Efficient use of materials

To Operate

- ↗ Use durable, long lasting materials
- ↗ Use passive energy systems that are cost effective for the area

# YWCA SHELTER - FARGO, NORTH DAKOTA

## **Office Spaces** **2,459 SF**

### **Administrative Offices**

- ↗ Executive Director
- ↗ Shelter Services Director
- ↗ Administrative Assistant/Reception
- ↗ Bookkeeper
- ↗ Campaign Assistant
- ↗ Community Relations Coordinator
- ↗ Facilities Manager
- ↗ Director of Finance
- ↗ Human Resources Director

### **Child Care Staff Offices**

- ↗ Child Care Director Office
- ↗ Lounge/Planning Area-14 Teachers

### **Direct Services Staff**

- ↗ Case Manager
- ↗ Children's Services Director
- ↗ Children's Services Coordinator
- ↗ Education & Employment Director
- ↗ Empowerment of Girls VISTA
- ↗ 2 Case Worker Offices

### **Restrooms**

### **Storage**

## **Housing** **54,745 SF**

### **Temporary Housing**

- ↗ Dorm Type Housing
- ↗ Kitchen
- ↗ Laundry

### **Transitional Housing**

- ↗ Apartment Type Housing
- ↗ Laundry

# YWCA SHELTER - FARGO, NORTH DAKOTA

## **Community Spaces 2,908 SF**

### **Living area**

- ↗ Large Gathering Spaces
- ↗ Small Spaces for Relaxing

### **Library**

- ↗ Book Stacks
- ↗ Working Stations

### **Counseling Rooms**

- ↗ 10 Rooms for Counseling
- ↗ Laundry
- ↗ Storage

## **Education Spaces 4,506 SF**

### **Classrooms**

- ↗ 2 Large Classrooms
- ↗ 2 Smaller Classrooms
- ↗ Computer Lab

## **Childcare Spaces 7,530 SF**

### **Day Care Facilities**

- ↗ Infant & Toddler Room
- ↗ Sleeping Area
- ↗ Restrooms
- ↗ Kitchenette
- ↗ Washer & Dryer Space
- ↗ Storage/Supplies

### **Child Education Facilities**

- ↗ Kindergarten Room
- ↗ After-School Room
- ↗ Storage/Supplies
- ↗ Restroom

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Administrative Offices

### **General:**

Square footage:

-Director's Office	160 sqft
-Shelter Services Dir.	160 sqft
-Admin. Assis./Reception	150 sqft
-Bookkeeper	140 sqft
-Campaign Assist.	140 sqft
-Community Relations	140 sqft
-Facilities Manager	140 sqft
-Director of Finance	140 sqft
-Human Resources	140 sqft
-Lobby	80 sqft
-Conference Room	200 sqft
-Mechanical	4% gross area
	<hr/>
	1654 sqft

Ceiling height: 8' minimum

Activity level: high during 9am-5pm  
low after office hours

### **Activity/User:**

The primary users of this space will be the administrative office employees. Visitors to the facility will also pass through this space as a security measure before reaching the residence in the shelter.

### **Spatial Considerations:**

The administrative office space needs to be the primary entrance for those entering the facility and therefore needs to be located where the most traffic will be coming from. A highly identifiable entrance will need to be created here.



# YWCA SHELTER - FARGO, NORTH DAKOTA

A living room type atmosphere will be in the lobby/entrance area to make people feel comfortable.

## **Materials:**

Materials will resemble those used in residential buildings whenever possible.

## **Equipment:**

Desks and filing cabinets in each office  
Chairs in reception area for waiting area  
Fireplace in the waiting area for a living room feel

## **Environment:**

Lighting: ambient and task lighting  
Color: warm, inviting earth tones  
Acoustic: offices should have enough acoustic privacy to buffer a normal speaking voice from office to office

## **Notes:**

# YWCA SHELTER - FARGO, NORTH DAKOTA

## **Childcare Offices**

### **General:**

Square footage:

-Director's Office	150 sqft
-Lounge/Planning	400 sqft
-Storage	144 sqft
-2 Restrooms @ 40	80 sqft
-Mechanical	4% gross area
	805 sqft

Ceiling height: 8' minimum

Activity level: high during 9am-5pm

Low after office hours

### **Activity/User:**

The primary users of this space will be the childcare office employees. Mothers of the children will occasionally be in this space to speak with teachers.

### **Spatial Considerations:**

A living room type atmosphere will be in the lobby/entrance area to make children feel comfortable.

This space needs to have a lounge type area and break room for 14 teachers. This area will function as a coffee room, mail room, storage and restrooms.

This space will share the lounge and restrooms with the administrative offices.

### **Materials:**

Materials, again, will resemble those used in residential buildings and be durable.

## YWCA SHELTER - FARGO, NORTH DAKOTA

### **Equipment:**

- Desks and filing cabinets in the office
- Chairs and table in lounge area
- Mail sorting boxes
- Kitchenette

### **Environment:**

- Lighting: ambient and task lighting
- Color: warm, inviting earth tones
- Acoustic: offices should have enough acoustic privacy to buffer a normal speaking voice from office to office

### **Notes:**

This space needs to have easy access to the administrative offices and to the child care and child education center.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## **Temporary Housing**

### **General:**

Square footage:

-40 Units @ 140 sqft	5600 sqft
-Laundry	400 sqft
-20 Bathrooms @ 48	960 sqft
-5 Kitchens @ 120	600 sqft
-5 Dining/Living @ 200	1000 sqft
-Storage	1000 sqft
-Mechanical	3% gross area
	9,847 sqft

Ceiling height: 8' minimum

Activity level: Medium during the day  
Low at night

### **Activity/User:**

The primary users for this space will be women and children that are coming to the shelter without many of their personal things. The urgency of the need for housing is the main purpose for the temporary shelter. These people will require more of a feeling of protection as they maybe running from an abusive relationship or trying to overcome a drug addition among other hardships.

### **Spatial Considerations:**

This space will be dorm-like in the space layout with a personal residence feeling on the inside

Laundry areas are needed on each floor.

### **Materials:**

Durable

## **YWCA SHELTER - FARGO, NORTH DAKOTA**

### **Equipment:**

- Bathroom fixtures
- Double and twin size beds
- Chest of drawers

### **Environment:**

Lighting: ambient and task lighting with appropriate home fixtures

Color: earth tones – to appeal to many residents because of the high turnover rate

Acoustic: residential spaces should have acoustic privacy in between neighboring spaces

### **Notes:**

This space needs to be well protected from the surroundings outside the complex to make people feel secure.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## **Transitional Housing**

### **General:**

Square footage:

-18	1 bedroom units @ 580	10440 sqft
-36	2 bedroom units @ 650	23400 sqft
-9	3 bedroom units @ 850	7650 sqft
-6	Laundry @ 100	600 sqft
-	Storage	1500 sqft
-	Mechanical	3% gross area
		44,898 sqft

Ceiling height: 8' minimum

Activity level: Medium during the day  
Low at night

### **Activity/User:**

The primary users for this space will be women and children that are coming to the shelter because of financial problems. The lack of affordable housing is the main purpose for the temporary shelter. These people will require more independence as they receive help and save money to live on their own.

### **Spatial Considerations:**

This space will be apartment-like in the space layout with a sense of community within the shelter.

Not all the apartment spaces will have furniture provided assuming some of the women will have their own belongings with them. For this reason, furnishings are mobile to be moved to the spaces that they are needed or to be put into storage until later. Storage spaces will be in each apartment unit for personal belongings.



# YWCA SHELTER - FARGO, NORTH DAKOTA

Large storage area in the building for furnishings that are not being used.

Laundry areas will be on each floor.

## **Materials:**

Durable and moveable

## **Equipment:**

Bathroom fixtures

Kitchen fixtures

Living room furnishings

Double and twin size beds

Chest of drawers

Laundry fixtures

## **Environment:**

Lighting: ambient and task lighting  
with appropriate home fixtures

Color: to appeal to many residents  
because of the high

Acoustic: residential spaces should  
have acoustic privacy in between  
apartments

## **Notes:**

This space needs protection but also  
needs the ability for women to easily  
come and go for employment, grocery  
shopping, doctor appointments, etc.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Living Area

### **General:**

Square footage:

-Living room	1120 sqft
- Storage	144 sqft
-2 Restrooms @ 40	80 sqft
<u>-Mechanical</u> <u>2% gross area</u>	
	1,290 sqft

Ceiling height: 10' minimum

Activity level: High during the day  
Low at night

### **Activity/User:**

The primary users for this space will be women and children relaxing in this space. The space can also be used for group events or counseling sessions.

Small alcove spaces are needed for semi-private activities such as telephone conversations or reading. Larger spaces with seating and activity areas are needed for interaction of the residence as desired.

### **Spatial Considerations:**

This space will be arranged in a living room style layout with couches and chairs and have an activity area with tables.

### **Materials:**

Durable

### **Equipment:**

Couches  
Chairs  
Fireplace  
Television

## YWCA SHELTER - FARGO, NORTH DAKOTA

Tables  
Shelves for accessible storage  
Restroom

### **Environment:**

Lighting: ambient, some areas with  
task lighting  
Color: Warm and inviting earth tones  
Relaxing greens and blues  
Acoustic: should have sound absorbing  
materials to reduce noise

### **Notes:**

This space needs to be accessible from  
the administrative offices and from the  
housing buildings

# YWCA SHELTER - FARGO, NORTH DAKOTA

## **Library**

### **General:**

Square footage:

-Library	800 sqft
-Storage	100 sqft
-Mechanical	2% gross area
	918 sqft

Ceiling height:10' minimum

Activity level: High during the day  
Low at night

### **Activity/User:**

The primary users for this space will be women and children living in the shelter that are coming to read for enjoyment or to research reference books for the education portion of the facility.

### **Spatial Considerations:**

This space will have relaxing areas for pleasure reading and tables for research reading. A large open area is needed for reading to children.

### **Materials:**

Durable

### **Equipment:**

Book Stacks  
Check out desk  
Worktables  
Comfortable chairs

### **Environment:**

Lighting: ambient and task lighting

## **YWCA SHELTER - FARGO, NORTH DAKOTA**

Color: earth tones, greens, and blues  
conducive to a quiet  
atmosphere

Acoustic: should be buffered  
acoustically from noises outside  
of the space

### **Notes:**

This space should be directly  
accessible from the living area and also  
have easy access to the education  
facilities.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Counseling Rooms

### **General:**

Square footage:

-10 Private Rooms @ 144	1440 sqft
-File Storage	225 sqft
-Mechanical	2% gross area
	1,700 sqft

Ceiling height: 8' minimum

Activity level: High during the day

### **Activity/User:**

The main users of this space will be most residents of the shelter and the counselors.

### **Spatial Considerations:**

These rooms will need to be relaxing and home-like in furnishings. The rooms also need to have sunlight.

### **Materials:**

Durable

### **Equipment:**

Comfortable chairs

### **Environment:**

Lighting: ambient, fixtures to resemble home environment as much as possible

Color: Soothing, soft greens- for relaxing qualities  
yellow accents- good color for conversation, counseling, and well-being.

Acoustic: Sound isolation is a necessity in each room

### **Notes:**



# YWCA SHELTER - FARGO, NORTH DAKOTA

## **Classrooms**

### **General:**

Square footage:

-2 Classrooms @ 1200	2400 sqft
-2 Classrooms @ 625	1250 sqft
-Storage	500 sqft
-Computer lab	225 sqft
-Mechanical	3% gross area
	4,506 sqft

Ceiling height: 8' minimum

Activity level: High during the day

### **Activity/User:**

The main users of this space will be most of the residents and the instructors.

### **Spatial Considerations:**

The classrooms need to be able to accommodate classes for the residents and for those coming to the facility only for classes. The classrooms should be accessible from the outside for this reason.

### **Materials:**

Durable

### **Equipment:**

Computer lab  
Desks

### **Environment:**

Lighting: ambient and task lighting

Color: Yellows

- can relieve depression, tension, fear
- represents intellect, enlightenment, communication
- use in classrooms

## YWCA SHELTER - FARGO, NORTH DAKOTA

Brown

- Can help with concentration
- Use as accents and in wood tones

Acoustic: should be buffered acoustically from noises outside of the space

**Notes:**

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Day Care Facilities

### General:

Square footage:

-Play areas	2300 sqft
-Laundry	25 sqft
-2 Restrooms @ 40	80 sqft
-Kitchenette	25 sqft
-Storage	500 sqft
-Mechanical	3% gross area
	3,018 sqft

Ceiling height: 8' minimum

Activity level: High during the day

### Activity/User:

The primary users of this space will be the children staying at the shelter who need supervision when their mothers are away from the shelter or in class and counseling sessions.

### Spatial Considerations:

- ↷ Adequate room for large play equipment
- ↷ Fixtures should be low, as should windows and boundaries.
- ↷ Loft or elevated space for children to see the room from above
- ↷ Small, private spaces that children can go to and still have adult supervision
- ↷ Quiet areas for naptime away from play area
- ↷ Direct access to outdoor play area

### Materials:

Durable and washable

### Equipment:

Storage for toys  
Kitchenette

## YWCA SHELTER - FARGO, NORTH DAKOTA

Dining and activity tables  
Washer and Dryer Space  
Coat Storage

### **Environment:**

Lighting: ambient, fixtures to resemble home environment as much as possible

Color:

Yellows- can relieve depression,  
tension, fear  
-use in playrooms

Greens- relaxing, tranquil, refreshing  
- use in resting areas

Acoustic: Soft, sound absorbing materials are needed

### **Notes:**

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Child Education Facilities

### General:

Square footage:

-2 Classrooms @ 1200	2400 sqft
-Kitchen	150 sqft
-2 Restrooms @ 215	430 sqft
-Storage	500 sqft
<u>-Mechanical</u> <u>3% gross area</u>	4,512 sqft

Ceiling height: 8' minimum

Activity level: High during the day

### Activity/User:

Children staying at the shelter

Employees of the childcare areas

### Spatial Considerations:

The children's classrooms will be close to the daycare and share the same kitchen and restroom facilities.

### Materials:

Durable Materials

### Equipment:

Desks

Coat Storage

### Environment:

Lighting: ambient and task lighting

Color:

- Yellows- can relieve depression, tension, fear
  - represents intellect, enlightenment, communication
  - use in classrooms
- Brown- Can help with concentration

## **YWCA SHELTER - FARGO, NORTH DAKOTA**

-Use as accents and in wood tones

Acoustic: should be buffered acoustically from noises outside of the space

### **Notes:**



**YWCA SHELTER - FARGO, NORTH DAKOTA**

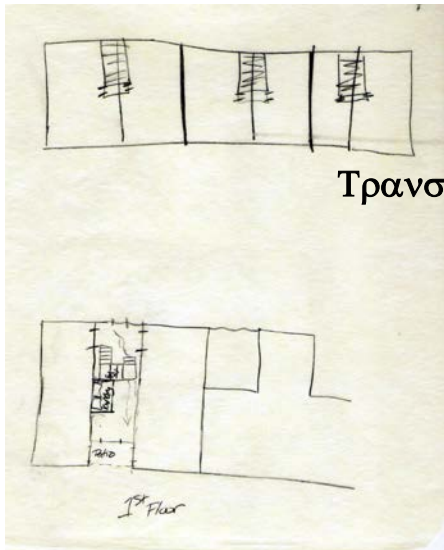
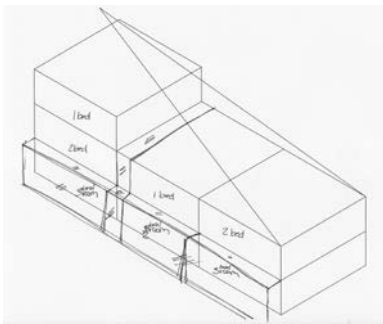
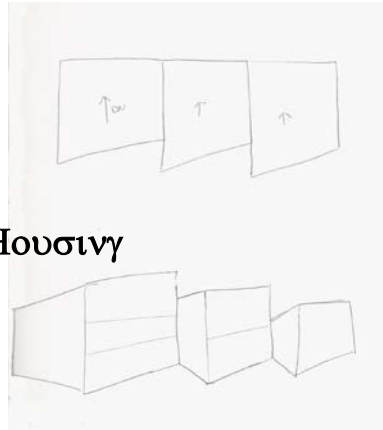
DESIGN PROCESS

Design Process  
**Design Process**

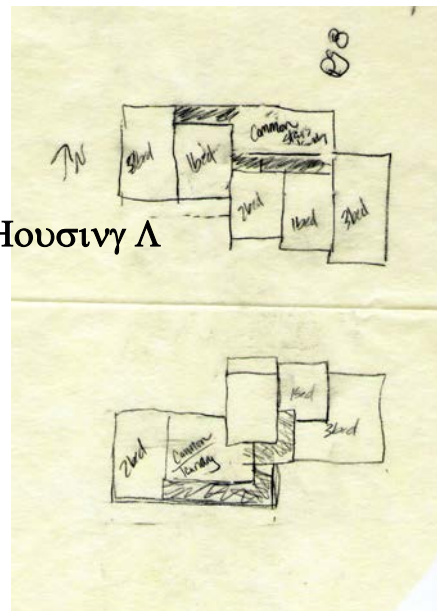
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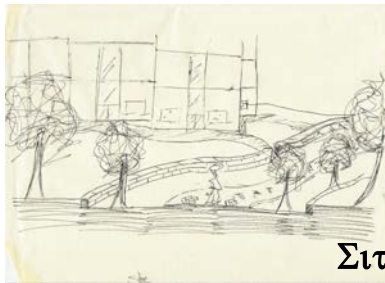
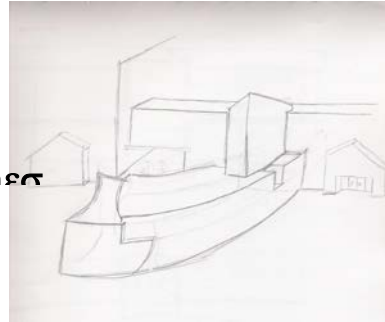
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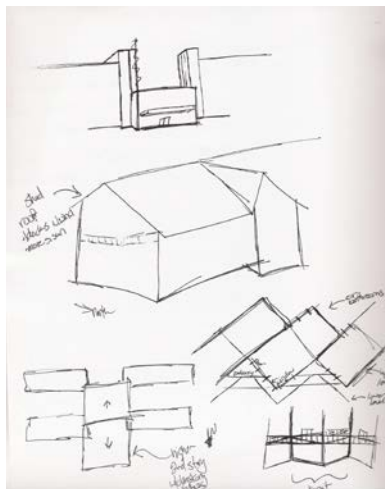
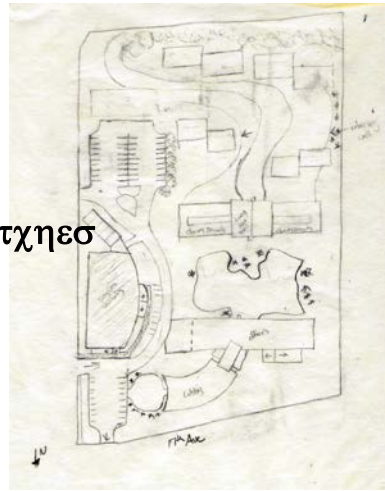
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Σκετχης



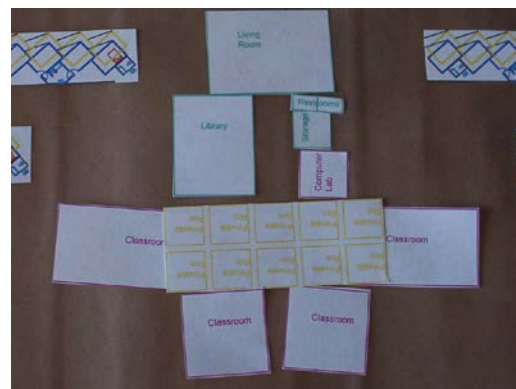
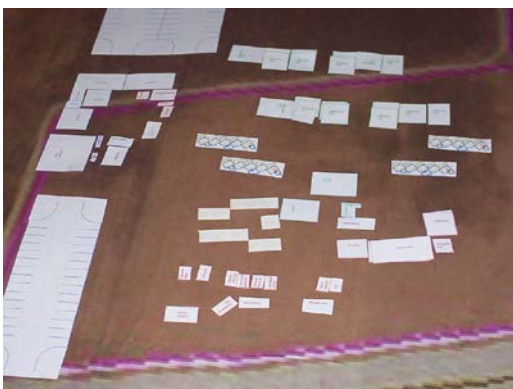
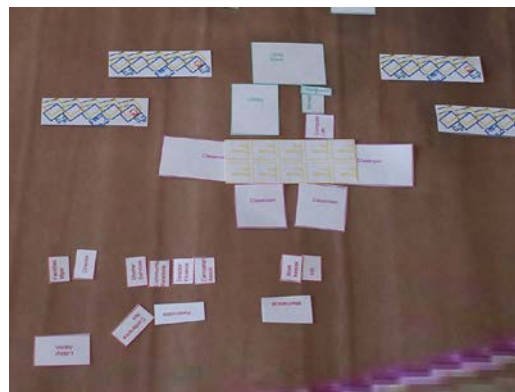
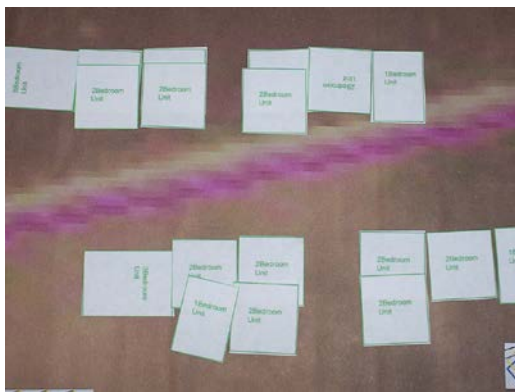
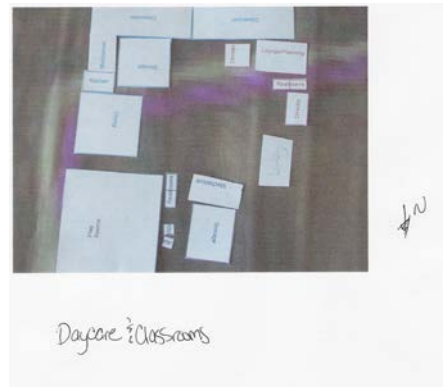
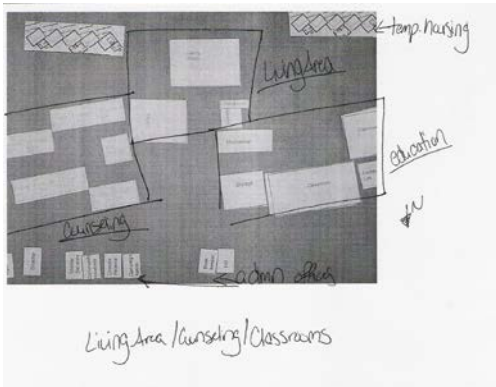
Σιτε Σκετχησο



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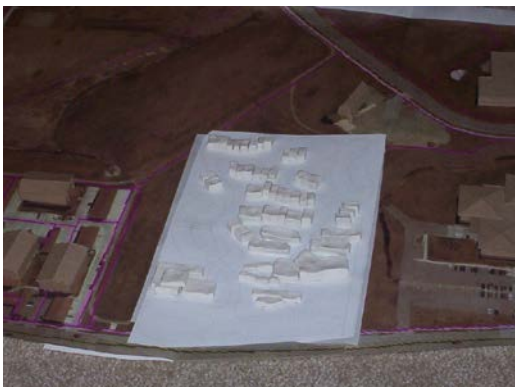
# YWCA SHELTER - FARGO, NORTH DAKOTA

DESIGN PROCESS



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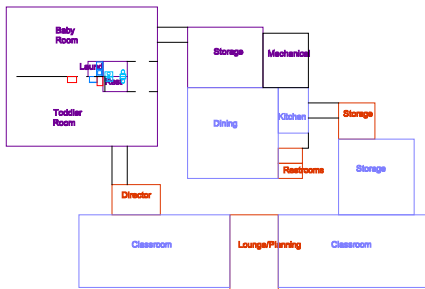
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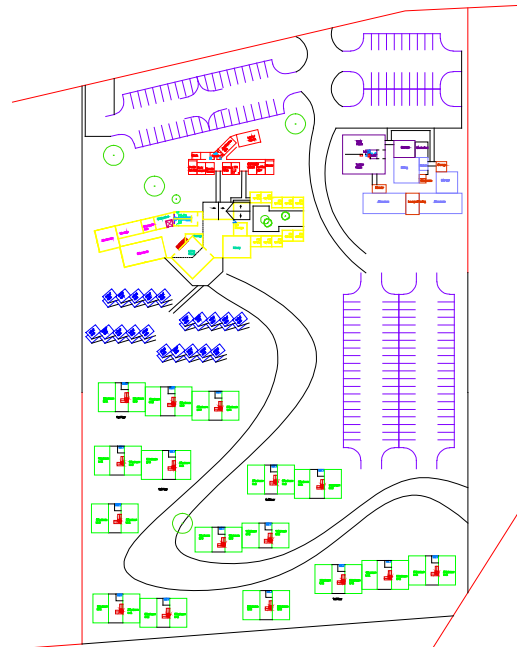
DESIGN PROCESS

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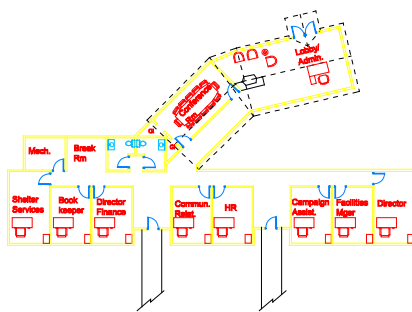
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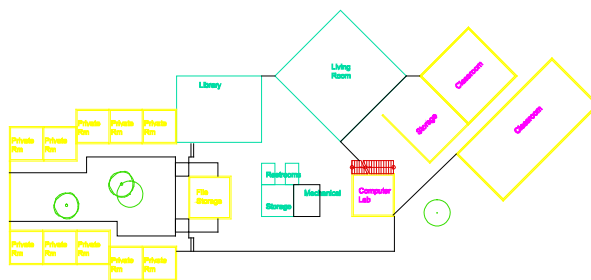
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**YWCA SHELTER - FARGO, NORTH DAKOTA**

DESIGN SOLUTIONS

Design Solutions  
**Design Solutions**



# YWCA SHELTER - FARGO, NORTH DAKOTA



**Final Site Plan**

# YWCA SHELTER - FARGO, NORTH DAKOTA



## Transitional Housing Plan

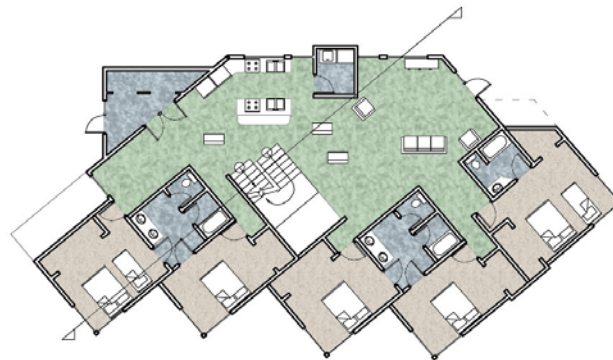
The typical residents of the transitional housing are women that are coming to the shelter because of financial problems and the lack of affordable housing in the area. The purpose of this housing type is to give more independence than the temporary housing offers. The residents will receive assistance, such as job training, to again become self-sufficient.

A common entry connects 2 upper and 2 lower apartments and contains laundry facilities on the 1st floor. Community gathering spaces are on the ground floor sitting area and on the second story balconies.

# YWCA SHELTER - FARGO, NORTH DAKOTA



2nd Floor



1st Floor

## Temporary Housing Plan

The temporary housing serves women needing to stay at the shelter for only a short time because of circumstances such as homelessness or running from an abusive relationship . This housing type consists of 5 single room occupancy units to a floor and each floor shares the kitchen and living room areas. Furniture is provided in all units.



# YWCA SHELTER - FARGO, NORTH DAKOTA



Living Room and Classrooms  
2nd Floor



Living Room and Classrooms  
1st Floor

## Community Building

The community building is used by residents of the shelter and non-residents who are participating in programs at the YWCA. The living room area contains T.V. viewing areas, conversation areas, and room for board games and other activities. The library contains research books on topics covered in classes, such as abuse, violence, and pregnancy. In the education wing, the four classrooms can be arranged in a variety of ways to fit the needs of the classes and the computer room is located nearby for class and personal use.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Counseling Building

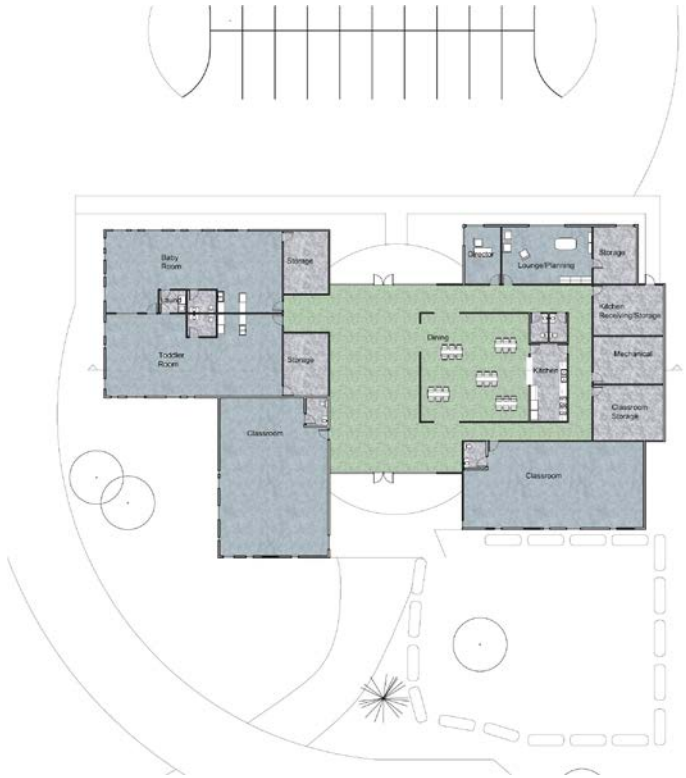
The counseling area is located near the community building and is used by residents and non-residents of the shelter. A lobby area is at the entrance and looks out into the courtyard. The walls around the courtyard are glazed to let as much light as possible to the interior. The windows that face the outside of the building in the counseling rooms are translucent to provide privacy.



## Administration Building

The purpose of the Administration building is to act as a security point for the shelter and to provide the employees with a comfortable working environment. The building is positioned at the entrance of the site for monitoring vehicles entering the shelter complex and to provide a place to screen visitors. This building will also be the information center for all the programs the shelter offers.

# YWCA SHELTER - FARGO, NORTH DAKOTA



DESIGN SOLUTIONS

## Daycare Building

The daycare facility provides childcare to mothers that are attending classes, work, counseling or other appointments. The daycare offers infant and toddler care as well as before and after school programs for elementary age children. The divisions of age groups are brought together by common hallways, play yard, and a single lunch room to encourage interaction between all ages and to allow siblings time together while at the facility. The windows of the building are placed at various heights to imitate the dynamic activity of the building's function while providing views of the outdoors to children of various ages.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Site description

The site for the YWCA shelter for women and children is a lot in south Fargo, North Dakota located at the 17th Avenue Southwest and 45th Street block. The former Banner Health Systems building located to the west is the closest built structure near the site and is now vacant. To the north of the site there are three-story apartment buildings and the U.S. Bank building. The Ramada hotel is northeast of the site and the east side is flanked by more 3-story apartment buildings.

The lot is between commercial areas and residential areas making the site a good location for fitting the facility into the context of the surroundings.

The site has easy access to transportation routes. I-94 and 45th Street are the major connections in the area to all other locations. The area is also served by local bus routes which minimize the need for the residence of the shelter to have their own cars.



Ramada Hotel



Former Building of Banner Health Systems



Apartment Buildings



US Bank



Office Building

## Site analysis



Local Bus Routes



Land Use



Site Analysis



# YWCA SHELTER - FARGO, NORTH DAKOTA

## The Modern Movement

The Modern Movement created a broad style of architecture that began in the early 1900's. While the Modern style can be interpreted to mean different things to different people, the architects of the Modern Movement all used the same unifying concepts. Their goal was to look toward the future instead of the past in order to create solutions that would be universal, functional, and economic. The Modern Movement began in the early 1900's and the post war conditions of the time helped this architectural style to grow considerably because of the need for more affordable housing and the lack of funds available. The design solutions of the style focused on producing a building that would serve the occupants, create a sense of community and provide a healthier environment by bringing in as much sunlight and fresh air as possible.

Prefabrication was a growing practice at the time and the advances in technology led to mass production of pre-made building parts. The pre-made doors, windows, beams and fixtures became more economical to use and this had an impact on the way the buildings looked in the Modern Movement era.

Identifying features of a Modern building are the clean lines and lack of excessive ornamentation on both the exterior and interior. The floor plans are open and kept clear of clutter and the design is simple with focus on the clarity of the form itself.



## Design Concepts

The concept for the shelter combines the Modern Movement ideas with the needs of the YWCA organization to create a healthy environment and affordable housing.

The design for the YWCA shelter focuses on the need for fresh air and sunlight regardless of a person's income level. These healing aspects of the environment are important parts of the design and are incorporated in the flow-through ventilation of the buildings, the south-facing windows for sunlight and the walking path that represents flowing water. The meandering path and herringbone paving pattern creates the feeling of moving water and the buildings represent the clustered developments that occurs along river banks.

The material of the Modern Movement time was concrete and this is incorporated into the design for the shelter in the form of concrete blocks for structure. The CMU is tinted at the factory which reduces the cold, hard feeling of gray concrete and also reduces time and money spent in up-keep of the buildings by eliminating the need for constant painting.

A sense of community and interaction between the people in the shelter is encouraged by creating many common spaces in the design. The walking path pools out in areas in front of the transitional and temporary housing buildings to creating a common yard. Community balconies allow for more outdoor interaction between neighbors and shared living rooms and sitting spaces bring the community feeling inside.

## YWCA History

The YWCA was originally formed in 1858 with the goal of empowering woman and eliminating racism. Since the first established YWCA, the organization has expanded to about 300 communities across the nation. It is considered a safe-haven for women and children to come to during troubled times. The YWCA provides many programs built around the basis that all people deserve to be respected, to have shelter, to be free, and to live in peace. The YWCA offers shelter for those who don't have any other place to go, counseling for abuse and rape, and education in job training and personal health and safety. In 1910, the YWCA started community programs in Fargo, North Dakota and in 1977, shelter services were added. The YWCA now operates the largest shelter in North Dakota and northwest Minnesota. There were 882 women and children taken in at the shelter during 2001 alone. The largest percentage of people who come to the shelter are leaving an abusive relationship.



Young Women's Christian Association  
A Home to Run to

# YWCA SHELTER - FARGO, NORTH DAKOTA

### Administration Building

The purpose of the Administration building is to act as a security point for the shelter and to provide the employees with a comfortable working environment. The building is positioned at the entrance of the site for monitoring vehicles entering the shelter complex and to provide a place to screen visitors. This building will also be the information center for all the programs the shelter offers.

Passive Ventilation

Floor Plan  
1/16"=1'-0"

### Childcare Building

The daycare facility provides childcare to mothers that are attending classes, work, counseling or other appointments. The daycare offers infant and toddler care as well as before and after school programs for elementary age children. The divisions of age groups are brought together by common hallways, play yard, and a single lunch room to encourage interaction between all ages and to allow siblings time together while at the facility. The windows of the building are placed at various heights to imitate the dynamic activity of the building's function while providing views of the outdoors to children of various ages.

Floor Plan  
1/16"=1'-0"

Passive Ventilation

Typical Wall Section for Community Areas  
1"=1'-0"

Section of Administration Building

Section of Daycare Building

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Transitional Housing

The typical residents of the transitional housing are women that are coming to the shelter because of financial problems and the lack of affordable housing in the area. The purpose of this housing type is to give more independence than the temporary housing offers. The residents will receive assistance, such as job training, to again become self-sufficient.

A common entry connects 2 upper and 2 lower apartments and contains laundry facilities on the 1st floor. Community gathering spaces are on the ground floor sitting area and on the second story balconies.



Floor Plans  
1/16"=1'



## Temporary Housing

The temporary housing serves women needing to stay at the shelter for only a short time because of circumstances such as homelessness or running from an abusive relationship. This housing type consists of 5 single room occupancy units to a floor and each floor shares the kitchen and living room areas. Furniture is provided in all units.



Floor Plans  
1/16"=1'



Section of Temporary Housing

Section of Transitional Housing





# YWCA SHELTER - FARGO, NORTH DAKOTA

## Community Building

The community building is used by residents of the shelter and non-residents who are participating in programs at the YWCA. The living room area contains TV viewing area, conversation area, and room for board games and other activities. The library contains research books on topics covered in classes, such as abuse, violence, and pregnancy. In the education wing, the four classrooms can be arranged in a variety of ways to fit the needs of the classes and the computer room is located nearby for class and personal use.



## Counseling Building

The counseling area is located near the community building and is used by residents and non-residents of the shelter. A lobby area is at the entrance and looks out into the courtyard. The walls around the courtyard are glazed to let as much light as possible to the interior. The windows that face the outside of the building in the counseling rooms are translucent to provide privacy.

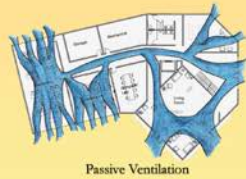
The passive ventilation in building cannot rely on open windows for airflow because of privacy issues. For this reason, openings in the exterior walls are placed above a false ceiling in the private rooms that will help ventilate the warm air that rises to the ceiling. This system would be complemented by an active ventilation system when necessary. The active system uses vents placed near the floor on the interior wall for the additional air supply and a vent in the ceiling on the exterior wall to pull the air through the room.



Floor Plans  
1/8"=1'



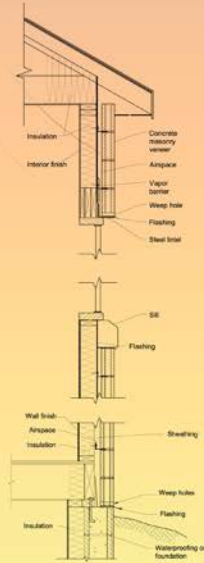
Floor Plans  
1/8"=1'



Passive Ventilation



Passive Ventilation

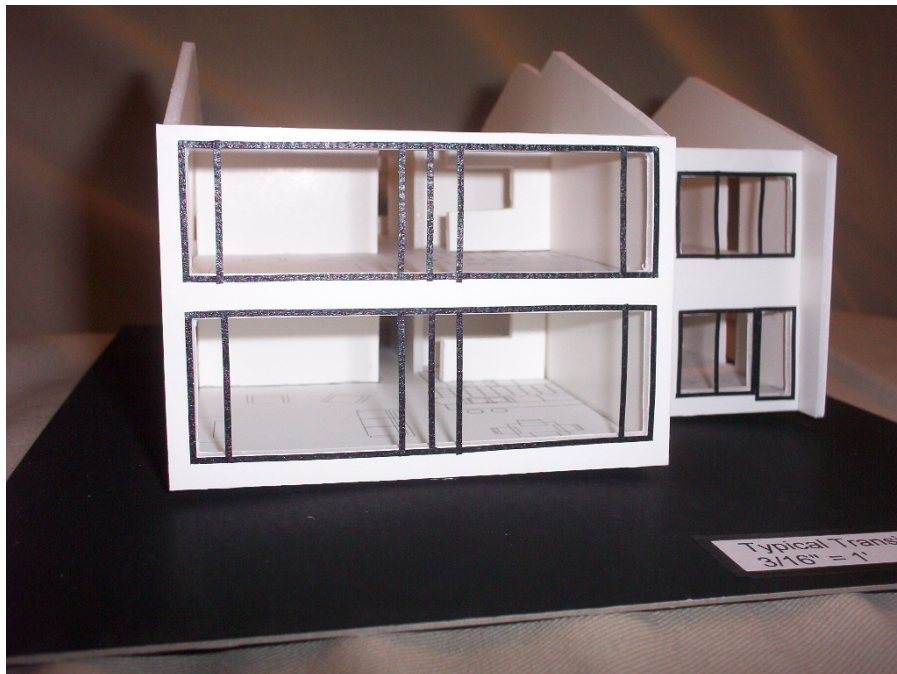


Typical Wall Section for Private Counseling and Residential Areas  
1"=1'



# YWCA SHELTER - FARGO, NORTH DAKOTA

DESIGN SOLUTIONS MODEL



**Transitional Housing Model**



# YWCA SHELTER - FARGO, NORTH DAKOTA



**Site Plan Model**

Appendix  
Appendix



# YWCA SHELTER - FARGO, NORTH DAKOTA

## Thesis Statement of Intent

### New YWCA Development Fargo, North Dakota

The Young Women's Christian Association (YWCA) assists women and children in need of safe housing. The organization has been in operation in the Fargo-Moorhead area since 1913 and opened its first shelter in 1978. The YWCA has since experienced many problems finding the proper space for the facilities needs. The latest problem is the lack of room to house the overflow of people that come to the shelter seeking help. During September 2001 to October 2002, there were 390 women and 232 children staying at the shelter. Another 1,086 requests for beds were turned down because there was not enough space. (The YWCA of Fargo-Moorhead Building Hope Campaign website: [www. http://www.ywcafargo-mhd.org](http://www.ywcafargo-mhd.org))

I propose the design of a facility for the YWCA that eases their housing shortage while providing space for the many programs they offer. The goal for this project is to create a comfortable and safe place with a sense of community for the women and children seeking shelter.

While the people in need of assistance will gain the most from the facility, it will also benefit the community by decreasing unemployment and homelessness. More people will get assistance and will be able to get back on their feet faster by creating a more accommodating YWCA.

## **YWCA SHELTER - FARGO, NORTH DAKOTA**

With this project, I wish to explore how the housing forms developed during the modern movement have applications to current housing problems. Research for this project will be directed towards understanding of the issues that the modern movement dealt with in developing their housing typology. I will be looking for a correspondence between the work the YWCA does and the issues faced by the government that created the development of the modern movement housing.

"There are homes you run from and homes you run to"

-Laura Cunningham

## Young Women's Christian Association

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Thesis Proposal  
Reggi Helling  
10.7.2004

### **A. User/Client Definition**

The YWCA of Fargo/Moorhead's mission is "to provide services and programs for women of all ages in order to empower them socially, economically, politically, spiritually and physically".

The YWCA is dedicated to helping women and children all over the world that are in crisis. This thesis project will give the organization in Fargo/Moorhead a larger facility to accommodate its many needs. Some of the services that the organization provides are childcare, education, and counseling. Shelter is available for those in need of a place to stay. Temporary housing needs to be available for women who need to leave a destructive situation and find emergency housing. Transitional housing needs to be available for those trying to create a better life for themselves and their children by offering an affordable place for them to live while getting the help they need. The spaces needed for many of these functions will need to be accessible for those who are living at the shelter as well as those who are attending only the programs.

# YWCA SHELTER - FARGO, NORTH DAKOTA

The employees of the YWCA are also a major user group. The workers and volunteers will need office spaces for meeting with the clients, storing files, and taking phone calls. The shelter needs to have a staff available 24 hours a day and will be able to access all other areas of the facility if needed during hours when there is not a full staff.

Parking will accommodate employees, volunteers, and users of the building. Approximately 150 spaces will be provided.

## **B. Major Project Elements**

- Shelter
  - Temporary
  - Transitional
- Offices
- Lobby
- Childcare
- Education
- Counseling Rooms
- Dining Rooms
- Kitchen
- Restrooms
- Parking

## **C. Site Information**

### **a. Economic Base & Demographics**

According to the U.S. Census Bureau, the total population of the city of Fargo, North Dakota was 90,599 in 2000. Employment statistics show that 24.9 percent of those 16 years of age and older did not have jobs.

The percentage of families below the poverty level in 1999 was at 6.6 percent and 23.1 percent of families with only a female householder were below the poverty level.

## **YWCA SHELTER - FARGO, NORTH DAKOTA**

According to the Networking Office of the Council on Abused Women's Services, 5,720 cases of domestic violence were reported to crisis centers in North Dakota in 2001. Women made up 93% of the victims reported in these cases. During this same period, there were 4,787 children with involvement in domestic violence cases.

A large population of the users is likely to have come from these types of backgrounds.

### **b. Site Area**

The area of the site is an empty lot in south Fargo, North Dakota located at 17<sup>th</sup> avenue southwest and 43<sup>rd</sup> street. The Banner Health System building is the closest building to the lot and is located directly to the west. North of the site is the US Bank Building and apartment buildings. Apartment buildings are also located to the east along with the Ramada hotel. South of the lot is the Ottertail Corporation building and the YMCA fitness building.

The topography of the site is flat with a slight slope down toward the parking lot on the east. There is evidence of water collecting in this low area on the edge of the site.

The grass on the lot is mowed and young trees have been planted. A sidewalk runs along the south side of the lot separating it from another empty lot farther south by the YMCA.

## **c. Transportation Links**

The Metro Area Transportation buses serve the West Acres area to connect with the Ground Transportation Center for links to other major areas of the Fargo and Moorhead area.

The site also has relatively easy access to interstate highways I-94 and I-29.

## **d. Solar Orientation**

Fargo, North Dakota is located at 46.9 degrees latitude. It is because of this latitude that sun exposure is drastically reduced in the winter months.

Maximum sunlight is during the months of May, June and July with the first measurable foot-candles starting 6am and ending at 7 and 8pm.

December has the shortest daylight availability with measurable foot-candles starting at around 9am and ending at about 5pm.

## **e. Prevailing Winds**

The prevailing winds in Fargo are from the north and there is no existing structures close enough on the north side to block the wind.

## **D. Project Emphasis**

There are two major points of focus to this thesis project. The first is how the Modern Movement solved housing problems. The second focus will be the similarities between the work of the YWCA and the housing problems faced by the government during the Modern Movement.

## **E. Plan for Proceeding**

### **a. Definition of Research Direction**

Research will focus on the time the Modern Movement was developed. Findings will consist of why it was developed, what parts were successful, and how it can be adapted to work in the present.

### **b. Describe the Design Methodology**

The design decisions for this thesis project will be driven by the Modern Movements desire to solve housing problems with affordable housing.

### **c. Documentation of the design process**

A binder will contain all the information of the design process at each step. Research, pictures of the site, pictures of models, sketches, Auto Cad models, comments during reviews, and thoughts pertaining to the project will all be collected in the binder.

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Schedule of Work:

### Fall Semester 2003

#### Week #1 (October 4-8)

October 7<sup>th</sup> Thesis Proposals Due (2 copies)  
October 7<sup>th</sup> Faculty Preference Slips Available

#### Week #2 (October 11-15)

October 14<sup>th</sup> Preference Slips Due in the Office  
**Research on Modern Movement Housing**

#### Week #3 (October 18-22)

October 21<sup>st</sup> Primary and Secondary Critics  
Announced

#### **Research on Modern Movement Housing**

#### Week #4 (October 25-29)

October 28<sup>th</sup> Last Day of Arch/La 561  
**Finish Research on Modern Movement  
Housing**

#### Week #5 (November 1-5)

#### **Gather Site Information**

#### Week #6 (November 8-12)

November 11<sup>th</sup> Veteran's Day Holiday  
**Set up volunteer times with YWCA  
Work on Draft of Program**

#### Week #7 (November 15-19)

Final Week of Ar/La 571 Design Studio  
**Work on Draft of Program**

#### Week #8 (November 22-26)

November 24<sup>th</sup> Draft Thesis  
Program due to Primary (1 copy)  
November 25<sup>th</sup>-26<sup>th</sup> Thanksgiving Break

#### Week #9 (November 29-December 3)

**Review of Program with Primary Critic  
Work on Final Program**



# YWCA SHELTER - FARGO, NORTH DAKOTA

Week #10 (December 6-10)

December 10<sup>th</sup> Last Day of Classes

**Work on Final Program**

Week #11 (December 13-17)

**Finals Week**

December 16<sup>th</sup> Program Grade due to Ar/La 561  
Course Instructor

Week #12 (December 20-24)

**Research**

Week #13 (December 27-31)

**Research**

Week #14 (January 3-7)

**Research**

## Spring Semester 2004

Week #15 (January 10-14)

January 11<sup>th</sup> Classes begin

**Conceptual and schematic design work**

Week #16 (January 17-21)

January 17<sup>th</sup> Martin Luther King Jr. Holiday

**Conceptual and schematic design work**

Week #17 (January 24-28)

**Conceptual and schematic design work**

Week #18 (January 31-February 4)

**Design Development**

Week #19 (February 7-11)

**Design Development**

Week #20 (February 14-18)

**Design Development**

# YWCA SHELTER - FARGO, NORTH DAKOTA

**Week #21 (February 21-25)**

February 21<sup>st</sup> President's Day Holiday

**Design Development**

**Week #22 (February 28-March 4)**

**Design Development Refinement for Reviews**

**Week #23 (March 7-11)**

**Mid-semester Thesis Reviews**

**Week #24 (March 14-18)**

Spring Break

**Presentation Drawings**

**Week #25 (March 21-25)**

March 25<sup>th</sup> Easter Holiday

**Presentation Drawings**

**Week #26 (March 28-April 1)**

March 28<sup>th</sup> Easter Holiday

**Presentation Drawings**

**Week #27 (April 4-8)**

**Presentation Drawings**

**Week #28 (April 11-15)**

**Presentation Drawings**

**Week #29 (April 18-22)**

**Finish Boards for Presentation**

**Week #30 (April 25-29)**

April 25<sup>th</sup> Thesis Projects due at 4:30pm in  
the Memorial Union

April 26<sup>th</sup>-27<sup>th</sup> Annual Thesis Exhibit in the  
Memorial Union

April 28<sup>th</sup>-May 5<sup>th</sup> Final Thesis Reviews

April 29<sup>th</sup> Draft of Thesis Document Due

# YWCA SHELTER - FARGO, NORTH DAKOTA

## Week #31 (May 2-6)

May 5<sup>th</sup> Final Thesis Reviews

May 6<sup>th</sup> Last Day of Classes

**Finish Final Thesis Document**

## Week #32 (May 9-13)

Finals Week

May 12<sup>th</sup> Final Thesis Document due at 4:30  
in the Office

# YWCA SHELTER - FARGO, NORTH DAKOTA

## F. Previous Studio Experience

### **Second Year Studio**

#### Fall: *D'anjou*

- Exhibit for rare artifact
- 4 Seasons Retreat House
- Architecture School in Copenhagen

#### Spring: *Yergens*

- Mixed Use 4 Story  
Residential/Commercial
- Church Remodel for ADA  
requirements
- Systems Investigation
- New Lutheran Church Design
- Lachine Bridge Design

### **Third Year Studio**

#### Fall: *Prafcke*

- Ronald McDonald House
- Kenworth Dealership

#### Spring: *Elnahas*

- Experimental Theater for  
Performing Arts
- West Acres Bank

### **Fourth Year Studio**

#### Fall: *Barnhouse, Urness, Walter*

- Urban Design – Downtown Fargo

#### Spring: *Falkner, Kratky*

- San Francisco High Rise mixed use
- Marvin Windows Competition-  
Residential/Commercial  
Neighborhood

### **Fifth Year Studio**

#### Fall: *Waronker*

- Olympic Flag/Metal Display
- Supreme Court Building

# YWCA SHELTER - FARGO, NORTH DAKOTA

## G. Bibliography and Research

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&geo\\_id=16000US3825700&\\_geoCon  
text=&\\_street=&\\_county=&\\_cityTown=  
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3&\\_lang=en&\\_sse=on](http://factfinder.census.gov/servlet/SAFFacts?_event=ChangeGeoContext&geo_id=16000US3825700&_geoContext=&_street=&_county=&_cityTown=Fargo&_state=04000US38&_zip=58103&_lang=en&_sse=on)

## **YWCA SHELTER - FARGO, NORTH DAKOTA**

YWCA of Fargo Moorhead. Retrieved

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APPENDIX - PROPOSAL



**Reggi Helling**

I would like to thank my thesis critics, Mohamed Elnahas and Mark Barnhouse, for their help with this project. I couldn't have had two better people to guide me through this process and I appreciate all the effort they put in to make my project a success.

I would also like to thank my family, friends and my boyfriend for putting up with the chaos that was thesis. I couldn't have done it without so much support.

*Reggi Helling*  
*Thesis 2004-2005*