THESIS REPORT
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THESIS TITLE: RE-ESTABLISHING THE SENSE OF NEIGHBORHOOD: AFFORDABLE HOUSING AS THE CATALYST.

A SENSE OF NEIGHBORHOOD
THESIS STATEMENT

Affordable housing is a national crisis that must be dealt with, and the architectural profession has a responsibility to address the crisis and lead the effort in resolving the situation. A crucial aspect of any type of housing is its ability to fit into an existing neighborhood and strengthen the 'sense of place' (neighborhood) that is already present or to re-establish the sense of neighborhood. Far too many architects develop housing schemes that may respond contextually to the existing surroundings on certain levels, but fail to respect or enhance the existing sense of neighborhood. I believe that undertaking an affordable housing project with respect to the neighborhood's 'sense of place' for my thesis project will better prepare me for my role as a practicing architect since affordable housing is increasingly returning as a major focus of the profession and our country.

THE NEED FOR AFFORDABLE HOUSING IS APPARENT
DOES THIS PROJECT CONTRIBUTE TO THE SENSE OF NEIGHBORHOOD?

THIS PROJECT IS BEGINNING TO ADDRESS THE ISSUE.
CONTEXT:

The project is located in the city of Goshen, Indiana (my home town), which is currently experiencing a housing shortage, particularly for the lower income levels. The local housing market is, and has been, producing a large number of developments for the middle and upper income levels with little effort being made to fill the lower to moderate income levels housing needs. This makes Goshen an ideal location to implement affordable housing.

Goshen, Indiana, is a city of about 20,000 people located twelve miles south of the Indiana/Michigan line and thirty miles southeast of South Bend, Indiana. Established in 1831, Goshen is predominantly a white community with a strong protestant influence. Besides being the county seat of Elkhart county, Goshen is also the location of Goshen College, a private Mennonite-affiliated school. The areas working population is largely employed in the manufacturing industry with a heavy concentration in mobile home and recreational vehicle production. Due to the large number of manufacturing jobs available in the area, Goshen has become a destination for those searching for employment with many people coming from out of state.

VICINITY MAP
SITE SELECTION:
Most of the current development in Goshen has been taking place in every part of the city except the north and northeastern portions, which are divided from the rest of the city by the Big Four Conrail tracks which bisect the city into two distinct areas. The north and northeastern portions of Goshen are areas where decline has started to take place and now show a need for new development to revitalize the areas as a viable part of the city. With this in mind the following site selection criteria were established.

Site Selection Criteria:
1. North or northeastern part of the city, because-
   - Needs improvement.
   - City growing in other directions.
   - No new developments in those areas.
   - Housing shortage exists in those areas.
2. Be a part of an existing neighborhood.
3. Be in an area where some of the housing is in need of repair.
4. Vacant or abandoned land

A site was located in northeastern Goshen which met all of the site selection criteria.
SITE:

ANALYSIS:
1. Located in the northeastern section of Goshen
2. Within an existing neighborhood.
3. Mixed condition of existing housing stock
   - some well maintained
   - some in disrepair
   - some resemble shacks
4. Site has an area of wet ground
   - has been filled-in in some areas
   - site has not been developed due to its location and wet ground, but has been filled-in enough that it is now possible to develop.
5. Church located within three blocks
6. Habitat for Humanity has built two houses four blocks away.
7. Located between two good traffic arteries, State Road 4 and the Goshen/Middlebury Road.
8. Located eight blocks from the central business district.
9. The North Goshen Medical Building is five blocks away.
10. Boys Club within walking distance.
11. Is bounded on opposite sides by two streets

SITE AND IMMEDIATE AREA
BACKGROUND INFORMATION CONCERNING THE SITE:

Through contact with Goshen’s Mayor, Mike Puro, it was learned that the selected site was owned by the Goshen Chapter of the Disabled American Veterans (D.A.V.). It was also learned that the D.A.V. wanted to develop the site into affordable rental housing for veterans. After contacting the Goshen Chapter of the D.A.V., the project became focused on working with them in developing the site for their specific needs.

THE D.A.V.’S SPECIFIC NEEDS:

1. Housing that could be rented below or at bottom level market rates.
2. Housing that would be handicap accessible.
3. Housing that the D.A.V. could finance themselves and implement in phases.

VIEWS OF THE SITE CONTEXT.
**GENERAL OBJECTIVES:**

The project is intended to address the housing needs of the low to moderate income level residents of the city, but rather than just providing a place for the residents to live the project will also be addressing issues of rental management and neighborhoods. Neighborhoods are a crucial element in providing people with a sense of place in the larger urban environment and also in establishing a sense of belonging. Too many housing complexes promote attitudes of apathy and disassociation by not providing people with a sense of place. The feeling of neighborhood can also be enhanced through the type of management and its relationship to the residents.

**Management Facilities**

The management will consist of a resident manager for the first 5 years as the need to do extensive repairs should not exist during the complex’s first years of operation. As the complex ages and expands there will be a need to have a full-time maintenance person, but until that time the manager will maintain the complex. It is important that the management be an active part of the overall complex, so the management facilities will become a part of the complex, acting as another member.

By being a member of the complex, an element of personal contact can be achieved between the residents and management through direct and visual contact. If the residents see the manager taking an active role in maintaining the complex it will enhance their desire to also take an active interest in the complex. By generating resident interest an important step in creating a neighborhood with a sense of place will have been reached. Also, with an interest in the complex the residents will take better care of their living units and the facilities, lowering maintenance costs through less damage and by helping with certain tasks. Another important factor of the management being involved in the everyday activities of the complex is that the residents will not feel as if they are invisible beings helping someone else become wealthy. The management facility, even though it will be a member of the overall complex, should be recognizable and distinguishable from the other dwelling units. This will eliminate possible confusion and add an element of variety to the complex.
Community facilities
The community facilities play an important role in bringing the entire complex together as a neighborhood. They become the common elements which relate to each of the different living units, providing opportunities for interaction among the residents and also between the residents and the larger community. The community facilities should be integrated into the complex rather than standing alone by themselves.

Living Units
The living units should relate to a street and to the common areas that will be provided. The units may be combined into forms which rise no higher than two stories above the street level to maintain a continuity with the existing residential fabric. The forms containing the living units should enforce the notion of neighborhood by relating to each other in overall organization and by respecting any precedents that are apparent in the existing fabric. Each living unit should have an entrance which provides the resident with an opportunity to distinguish and personalize it.

IS THERE A SENSE OF NEIGHBORHOOD PRESENT?
INVENTORY OF NEIGHBORHOOD CHARACTERISTICS:

1. STREET
2. LANDSCAPED STRIP OF GROUND BETWEEN THE STREET AND THE SIDEWALK.
3. TREES THAT ARE APPROXIMATELY 25 FEET TALL AND ORGANIZED ON THE STRIP OF GROUND BETWEEN THE STREET AND THE SIDEWALK.
4. STREET LIGHTS THAT ARE INCORPORATED INTO THE STREETSCAPE.
5. SIDEWALK.
6. FRONT YARD.
7. LANDSCAPING: SMALLER TREES AND PLANTINGS IN FRONT YARDS.
8. PORCH: LARGE ENOUGH TO HAVE A NUMBER OF CHAIRS OR A SWING AND SOME SORT OF BARRIER TO GIVE FEELING OF ENCLOSURE.
9. HOUSES: VARIETY OF STRUCTURES ON STREET.
10. APPROPRIATE LANDSCAPING AROUND THE HOUSES AND IN THE COMMUNITY AREAS.

NEEDS OF THE D.A.V. NEIGHBORHOOD:

1. OPPORTUNITIES FOR ACTIVITIES OUTSIDE OF THE DWELLING UNIT.
2. CONTACT WITH NEIGHBORS.
3. OPPORTUNITIES FOR INTERACTION BETWEEN THE RESIDENTS.
4. STREET LIFE.
5. COMMUNITY AREA.
6. FEELING OF INDIVIDUALNESS.
7. FEELING OF HOME.
8. PRIDE IN THE NEIGHBORHOOD.
9. FEELING OF BELONGING.
SITE DEVELOPMENT:

The idea of neighborhood was the prominent force behind the design of this housing complex. The elements that I chose to use to reinforce the idea of neighborhood are: a subtle sense of entry, a street, sidewalks, ordered trees lining the street; streetlights that are a part of the planned order; a cohesive planning of the landscape of the entire complex; areas for gathering near street corners; a community area with a pavilion and path through the natural elements that are present or have been created to enhance what is existing; porches on every dwelling unit that are large enough for people to sit and visit; and shared spaces inside the dwelling units (laundry facilities). In addition, there were special needs and considerations to be met for the residents. The needs and considerations that I chose to address were: the feeling that they are not being made to stand out as needy; the need to have a feeling of home; to be able to have an identifiable home; to have the sense of place; to be a part of a normal community; to have their own area outside to do as they please; to promote interaction between the residents; to allow chance meetings to occur; to provide a number of opportunities for casual contact of different degrees (visual, physical); to provide the residents with a number of opportunities to get out of the dwelling unit so that they do not just shut themselves in; to be able to have the opportunity, if they choose, to have some input on their immediate surroundings; and to have a place to hold large gatherings.

The organization of the dwelling units is based on what appears to be a typical subdivision plan. This organization comes about because of a number of contributing factors, one being the local zoning ordinance. Other factors contributing to the overall site organization are: the traffic circulation system, if made into a street can be dedicated to the city which will then maintain it, eliminating a costly expense for the D.A.V.; the D.A.V. expressed a concern that the street not be a straight shot across the site in order to eliminate its use as a shortcut between the two side streets; my desire to have the entire complex appear as one cohesive planned unit; to achieve an efficient use of the land; to reinforce the idea of neighborhood and the residents’ special needs and considerations; and that the complex will be constructed in phases as funds become available.
I believe that the basic organization of a typical street has many merits, but that they fall short because they are never taken far enough. Not enough layers are added before the public is allowed to take over, which never allows all the merits of the subdivision to come to fruition. I am not defending all subdivisions or similar developments because the location and context of each situation must be weighed in judging its appropriateness. The D.A.V. complex occurs within an area that has traditional streets and dwelling placement. To allow the new development to blend in and become a part of the existing neighborhood the continuation of a street type setting is very appropriate especially considering the other factors mentioned earlier in the text. The site is not located in a dense urban area, nor does it occur in an undeveloped area. The site is located in a section of the city which has not seen much new construction for the last twenty years and there is a need and an opportunity to contribute to the area. It would be a mistake to take away from, instead of participate with, the existing fabric. The complex is attempting to contribute to the overall sense of neighborhood and allow its residents to be a part of the greater neighborhood and not be set apart from it. The complex allows its residents to feel as though they are living in a normal residential setting, not assisted housing.
GENERAL DWELLING DEVELOPMENT:

The driving force behind the design of the individual dwelling units was to provide a form which was derived from the existing context, but did not merely mimic it. The use of steeply pitched roofs and gables was abstracted from the surrounding context and combined with the use of stucco, horizontal siding, band boards, and awning windows which provide planes of glass vs the traditional double hung. These allow the structures to fit into the context, but speak a modern vocabulary.

The porches were another important design element. The porches were meant to maintain a notion of simplicity, but with a sense of refinement being added through the use of an elliptical arch over the sitting space and the use of abstracted capitals on the columns. A variety of column spacing and arrangements was used to make the porches become distinguishable from each other, allowing them to be more individual.

Another issue involved in the development of the dwelling units was the cost factor. A number of different cost saving approaches were combined to allow the units to be built for $35-$40 per square foot, allowing them to be rented at an affordable rate. One of the cost saving approaches used was to provide an efficient use of space, which allows the structure to have a small footprint. Another approach was to set the structure up as a basic rectangle, to eliminate costly corners in the foundation and on the exterior of the structure. The major cost saving approach applied was the incorporation of modular construction, which allowed the units to be built more efficiently and with a greater degree of quality control. The mechanical and wet cores of the structures were designed to be pre-assembled and finished, with either the remaining parts of the structure being built around them or being comprised of other modular units. The time saved and quality gained through the use of the various cost saving approaches would account for a savings of 15%-20% over conventional construction.
MODULAR PRINCIPLE:

SPECIFIC APPLICATION - UNIT "C"
Specific Unit Type "C" Development:

The main organizing element in unit "C" is the stairway. It serves as a space divider as well as an aesthetic element. The stairway screens the first level bathroom and bedroom entrances while implying a separation between the dining and living spaces. The separation between the dining and living spaces is further enhanced by the lifting of the ceiling plane over the living area. The living area is allowed to expand into the second level of the unit through the open stairway and shuttered openings of the upstairs bedrooms. On the second level the stairway again organizes the spaces by screening the bedrooms from each other with its sides, which are now enclosed. Directly in front of the stairway landing is a gathering area that mimics the living area of the first level, but it is of a smaller and more private scale.

The stairway provides more for the unit than just organization and a spatial divider. It also serves as a lightwell which floods the inner areas with a wash of sunlight emitted through the clerestory windows placed at its top. The stairway acts as a ventilation shaft too, allowing the unit to maintain a comfortable atmosphere during the summer months.
The exterior of unit "c" uses the basic approaches discussed earlier, with the main focus of the facades changing as one moves around the structure. The facade facing the street has a traditional feel to it and is set up to imply two equal parts co-existing, with the axis between them accented by the gutter and down spout.

**STREET FACADE OF UNIT "C"**

The side facade is one in transition, with the dynamics of the rear facade being introduced by the shifting of the roof plane.

**SIDE FACADE OF UNIT "C"**
The rear facade moves away from the traditional and into the future with its composition of an implied whole, with the two parts accented this time by a bold composition of the facade elements.

THE REAR FACADE OF UNIT "C"
CONCLUSION:

I believe that my thesis project dealt with affordable housing in a realistic manner and that the incorporation of neighborhood issues into the project allowed it to go beyond the mere need for shelter and address the larger issue of 'a sense of place' that a neighborhood can create.

The thesis semester seemed to end as soon as it began with the many tasks involved in taking a project from conception through development filling the void between beginning and end. But even though my thesis is over, my exploration into the issues of affordable housing and a neighborhoods' 'sense of place' is not. My education is not at an ending point, but rather at the beginning with the knowledge and ideals gained over the past five years waiting to reveal themselves more fully to me. I look upon my thesis project as a learning experience which will assist me as I continue to learn more about architecture and the role architects play in the bigger scheme of things.
PROJECT BOARDS