NEIGHBORHOOD PLANNING FOR COMMUNITY REVITALIZATION

Reaney Feasibility Study

A CONSORTIUM PROJECT OF: Augsburg College; College of St. Catherine; Concordia University; Hamline University; Macalester College; Metropolitan State University; Minneapolis Community and Technical College; Center for Urban and Regional Affairs (CURA) at the University of Minnesota; University of St. Thomas; and Minneapolis community and neighborhood representatives.

Reaney Feasibility Study

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Planning Capstone 2002, University of Minnesota

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Planning Capstone 2002

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University of Minnesota

Table of Contents

This report examining the Reaney site in East St. Paul concludes that:

- **Asbestos contamination on the site can be abated and the contaminated areas used as recreational area.**
- **Approximately 150 units of housing are required to balance the increased costs of site preparation.**
- **There is a significant demand for multi-family affordable housing.**
- **The site has many unique assets such as its location, size of the site, and topological features which enhance the desirability for development.**

Opportunities

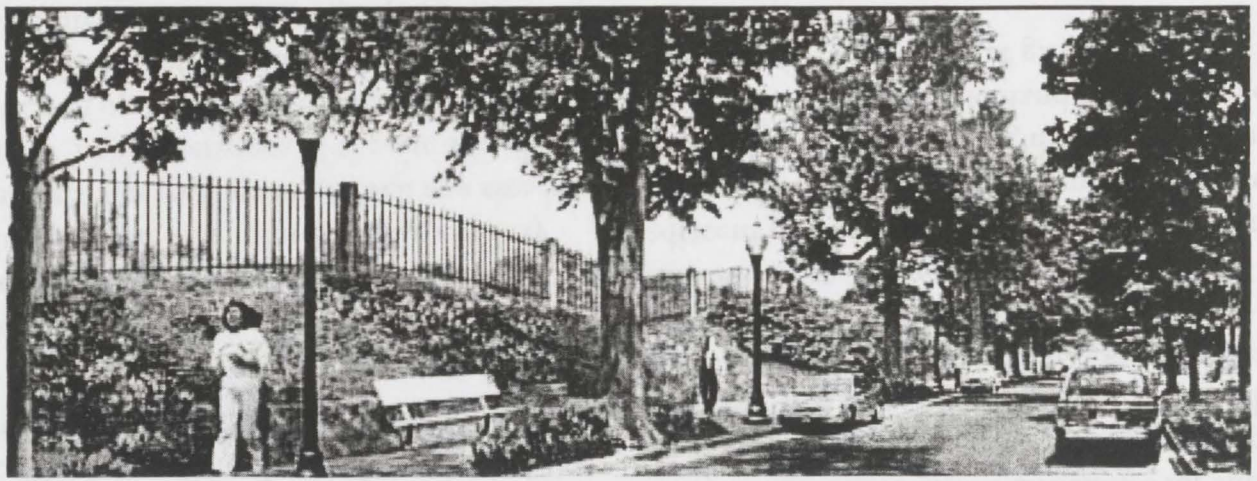
A number of opportunities are present on this site. It has ample area to provide for a variety of housing styles and layouts as well as a sizeable park area. The dimensions of the site also allow for buffering opportunities to lessen the impact of increased density of housing on adjacent properties. The site is accessible and properly zoned for residential construction. It is in an area with demand for both affordable and market-rate housing. Contamination on the site should make the owner of the property eager to transfer title to another party and escape costly liability for cleanup. Finally, a variety of funding sources are available for similar developments that may not be availabe at a later date.

Challenges

There are also a number of obstacles inherent to construction on this site. Asbestos contamination on roughly half the site is difficult and costly to abate. Abatement measures, which involve covering the entire contaminated area with a minimum of four feet of fill, constrain development options on the site by making it difficult to grade for productive use. Concrete contamination on much of the rest of the site presents construction difficulties for small and moderately sized construction, which must contend with unstable and potentially widely varying foundation materials. Steep topography on much of this site presents added difficulties for matching existing terrain where adjacent property cannot be acquired. Multi-family affordable housing alternatives are often not as well-received in neighborhoods as senior housing, although the demand for affordable multi-family housing is far greater.

It is our conclusions that, at this time and based on the information available, the project is feasible. We recommend that you proceed with the next step in the project, which would be an additional engineering evaluation of the site.

Area Assets



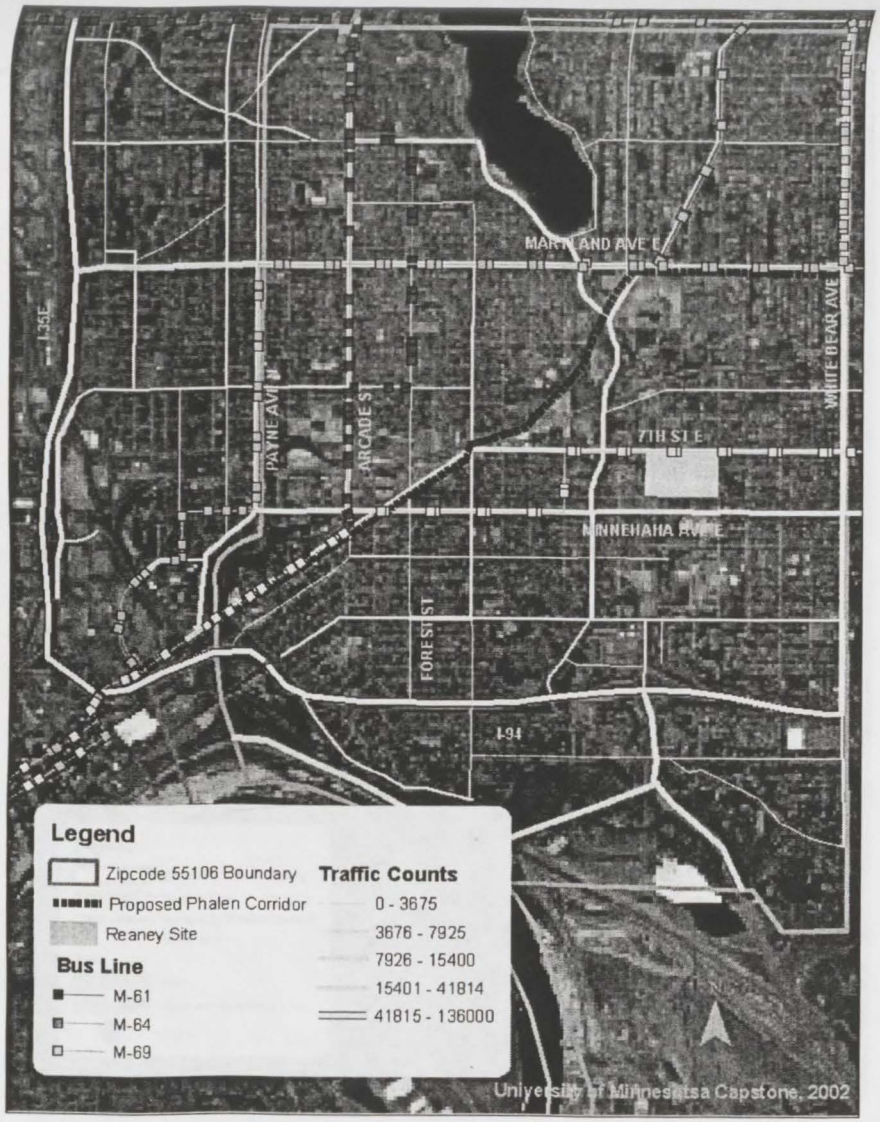


Figure 1.1: Transportation Assets Map; Road Access, Bus Service, Phalen Corridor and Traffic Counts.

Auto Access and the Road Network

The site enjoys excellent access to major freeways and higher capacity roadways. Most destinations in St. Paul and the Eastern suburbs are accessible in a twenty minute drive from the site.

The site is bordered by E 7th St to the north, which is accessible to downtown in under 5 minutes. Johnson Parkway lies just three blocks to the west of the site and leads to Lake Phalen to the North. White Bear Avenue lies just blocks to the east and is a major arterial running through the Eastside to Maplewood and the Northeastern Suburbs.

I-94 is located less than a half mile to the South and 35E is only a mile to the West. This excellent freeway access allows easy travel to nearly anywhere in the metropolitan area.

Anyone with auto access can easily travel to most destinations in the metropolitan area.

Transit

The site is directly accessible by the 69 busline. The 69 connets the Eastside to Downtown St. Paul, the VA, the Sunray center. This bus line runs every 10 minutes during peak times, every 15-20 minutes during weekday off peak times and every 30 minutes on weekends. This line does not offer service between 1:30 AM and 5:30 AM.

The 64 busline runs north of the site along Maryland Avenue. This line connects the Eastside to Downtown St. Paul, the St. Paul Ford Plant, the Hillcrest center and the Maplewood Mall. This line offers nearly identical service to that described abovc.

The 61 busline runs north along Arcade and is not very acessible to the site. This line connects Downtown St. Paul to Downtown Minneapolis. The service for this line is poor.

The aggegate accessibility by current transit is relatively low.

A future Busway is planned for the Phalen corridor just three blocks to the north. Operation is scheduled to begin in the Summer of 2002. This busway will connect to Downtown St. Paul and the MSP airport, as well as other destinations along the route. This route will offer high-speed service and minimum wait time (headways) along the line.

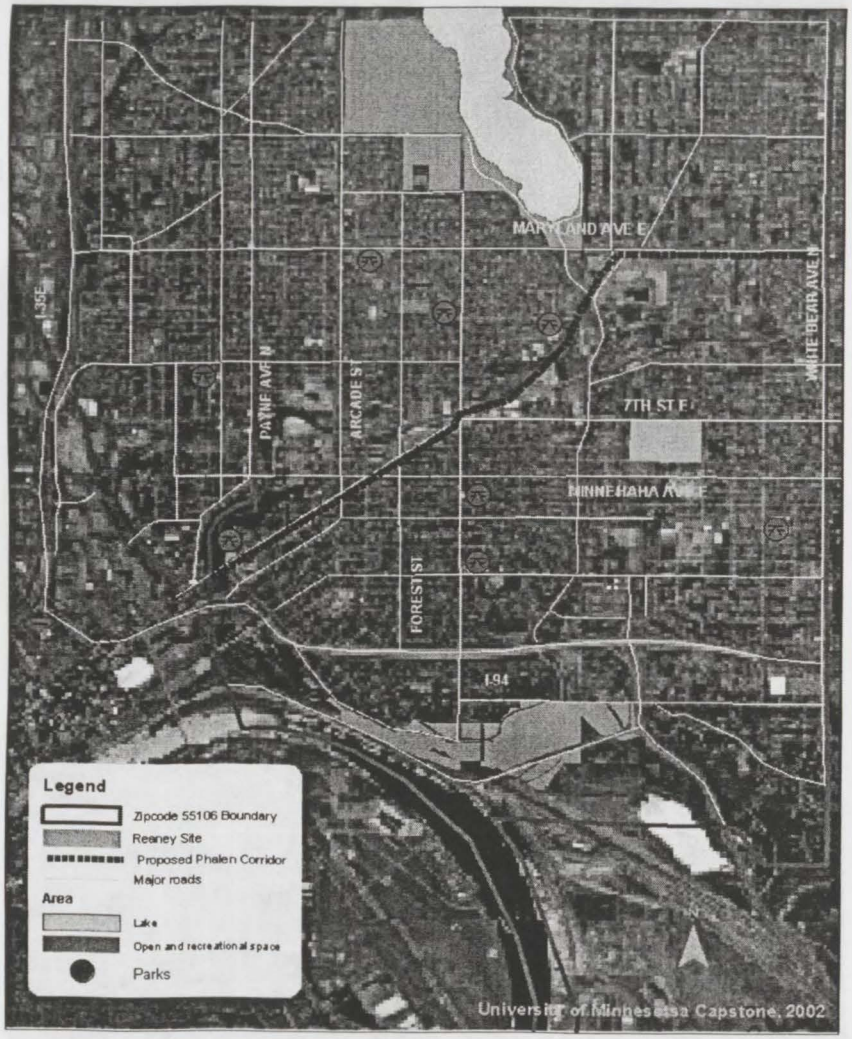


Figure 1.2: Recreation and Open Space Assets Map

Recreation and Open Space

The Eastside of St. Paul has good access to park space, but little accessibility to 'active' recreation space.

Regional Parks

The Phalen Lake Park Area has significant green space, along with a golf course. Lake Phalen is located just a half mile from the site to the Northwest. This park also boasts access to Lake Phalen.

Mounds Park is located two-thirds of a mile south of the site. Mounds Park offers stunning views of downtown St. Paul and the Mississippi River.

Neighborhood Parks

There are several neighborhood parks in the study, but none within a quarter mile of the site. Neighborhood parks are located just over a quarter mile to the southeast, northwest and southwest of the site. These parks offer limited amenities and serve the neighborhood residents.

Other park space

Harding High School, Parkway Elementary and other schools have open and recreational space associated with them, usually adjacent to the school. Parkway Elementary, located adjacent to the project site to the west, has a small playground and baseball diomand next to the school.

Figure 1.3: Institutional Assets Map

Institutions

There are many social and community related institutions operating in and around the Eastside of St. Paul. There are over20 churhces in operation in the study area offering a variety of community and social services.

Metropolitan State University is located about one mile southwest of the site. Metro State is a pillar to the Eastside community offering both technical and analytical expertise, as well as continuing education opportunities.

Daytons Bluff Neighborhood Housing Services offers a variety of housing options and assitance to Eastside residents.

Wilder Research also operates on St. Paul's Eastside. Wilder offers a variety of social services, technical expertise, and housing assistance.

Programs and iniatives

The Phalen Corridor Iniative focuses resources along the old rail corridor just blocks from the project site. The funding and planning focuses on creating a more conducive environment for industiral, workforce and commercial development.

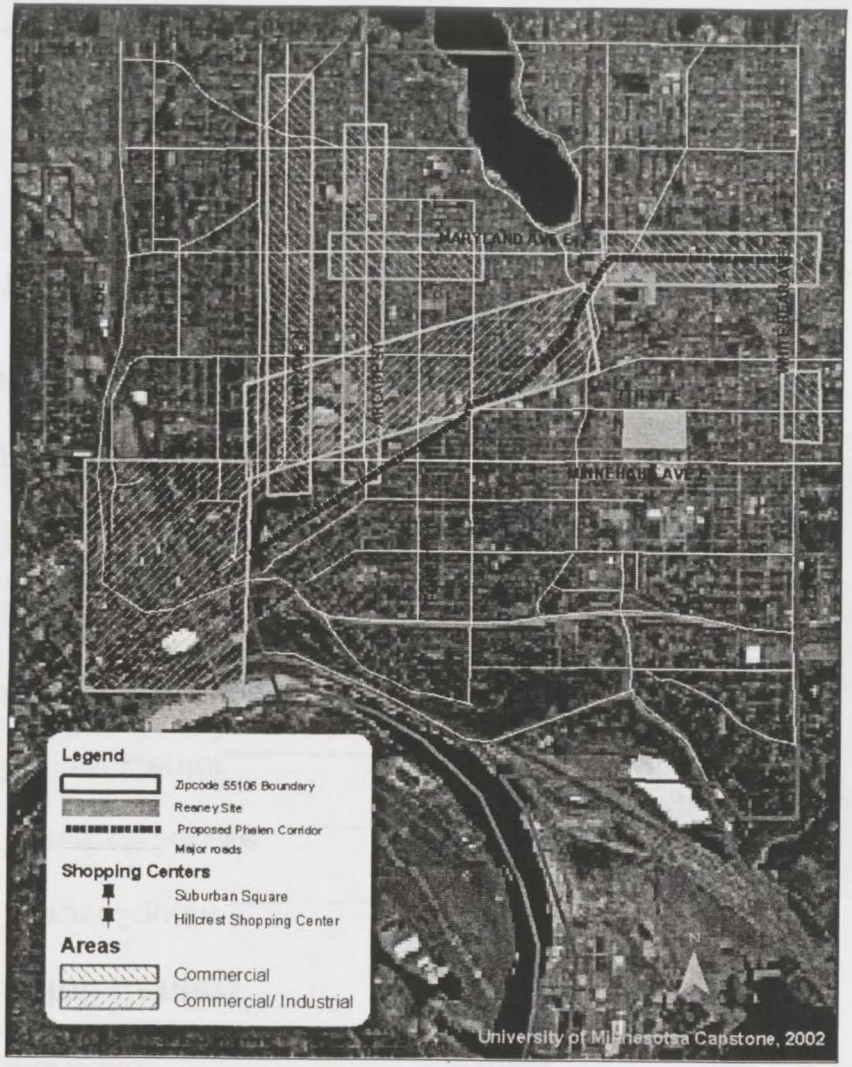


Figure 1.4: Commericlal and Retail Assets Map

Commercial and Industrial Opportunities

Commercial Corridors

The study area has many commercial/retail opportunities. The Payne Avenue corridor offers a number of retail opportunities, primarily small businesses. Payne Avenue is located about a mile from the project site. Arcade Avenue runs parallel to Payne Avenue to the east, and offers similar, but lower order retail establishments. Maryland Avenue intersects both Arcade and Payne and offers similar opportunities to those on Arcade.

Retail Centers

The four primary retail centers accessibile to the project site are the Suburban Square, the Hillcrest Center, Seeger Square and the Maplewood Mall. These site are nearly exclusively accessible by the automobile. Suburban Square and the Hllcrest Center are strip-style developments with a wide variety of retail options. The Maplewood Mall (*not located on map*) is located northeast of the Hillcrest Center. The Maplewood Mall is a large, enclosed regional shopping center that offers a wide variety of shopping choices. These retail opportunities are available in less than a ten minute drive.

Seeger Square is located just a half mile away on Arcade Avenue. Seeger Square has a grocery store, video store, restaurant and other retail establishments.

Commercial Corridors

	(distance from site)
Arcade	.8 miles
Payne	1 mile
Maryland	.8 miles

Retail Centers

Seeger Square	.5 miles
Suburban Square	.8 miles
Hillcrest Center	over 1 mile
Maplewood Mall	over 1 mile

Industry

3M	4 blocks
Railroad corridor	3 blocks
Phalen corridor	3 blocks

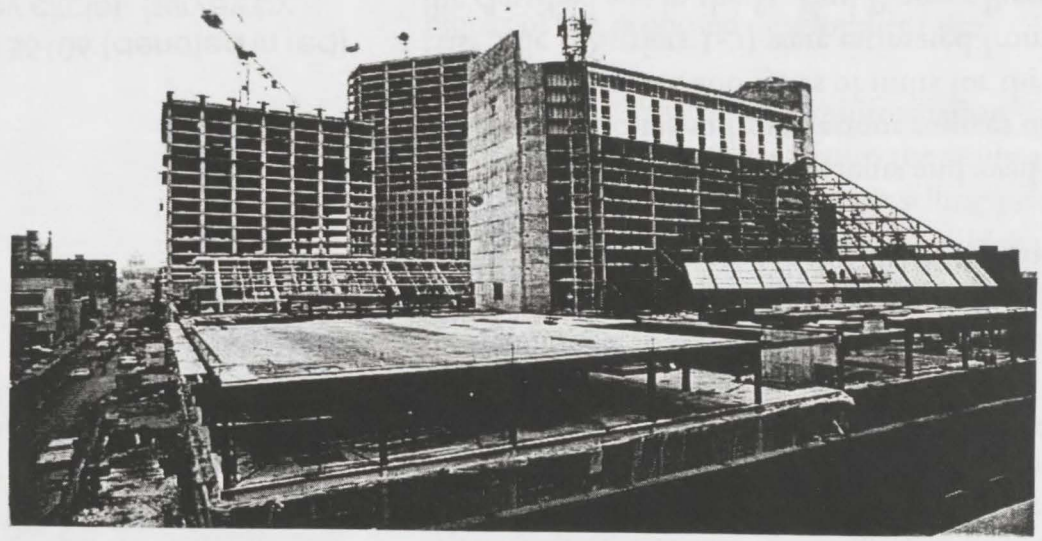
Table 1.1: Retail, Commercial and Industrial opportunities and their distance from the project site.

Industry and Employment Assets

The project site is located near one of the largest concentrations of industry in the City of St. Paul. 3M is located just 4 blocks away from the project site and offers a wide variety of well paid employment options. Although 3M recently announced cutbacks at the site, they plan to establish a research and development facility there. The 3M headquarters is located about two miles east of the site in Maplewood.

The old rail corridor located blocks from the site remains primarily industrial and plays home to a large number of living wage employment options. The Phalen Corridor, soon to enjoy a busway, offers a large number of employment opportunities and has undergone significant reinvestment in recent years. Many businesses and employment options are slated in the near future.

Market Considerations



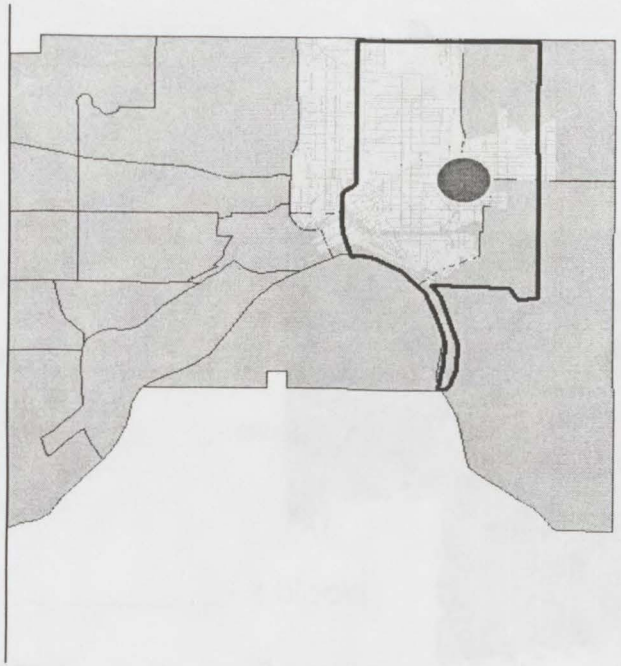


Figure 2.1: Zip Code 55106 (denoted in red) and project site (grey circle). *(survey by authors)*

Market Condition

The study area is the area bounded by zip code 55106. The market conditions for the study area have been summarized using economic and demographic data.

The year 2000 was the first year that census data was compiled at the zip code level. The University of Michigan's Document Center has created a census index for 1990, where it is possible to locate housing and population data from 1990 at the zip code level. This information was used to examine trends in population, race, age, income, and household size for the study area. Household size data for 2000 from Districts 4 and 5 was used as an approximate for the 55106 zip code area.

Information regarding rents and availability was also taken from various sources of data. The number and types of units for the East Side (Districts 1-5) were estimated from the classified ads in the St. Paul Pioneer Press for the weeks of February 17-23 (week 1) and February 24-March 2, 2002 (week 2). This data source was also used to estimate current market rents and rental rates.

Telephone interviews with property managers of Greenbrier Coop, Birmingham Woods, York Manor, and Pioneer Apartments were used to estimate identical characteristics within the study area. All are located within 3 blocks of the proposed development site

Realtor interviews and information taken from 20 home sales within the study area were used to approximate average selling price for a home. Information from St. Paul Housing Information Office was used to create a profile of the current housing competition on the East Side.

Within the study area trends of increasing population, particularly minorities, increasing household size, and increasing low-income families are seen between 1990 and 2000. Additionally, the average selling price for home increased and the number of larger units (3-4 BR) is relatively low. Unfortunately, current and proposed housing developments are creating only a negligable number of affordable housing units.

Age	Population	Age	Population
Under 5	4,580	Under 5	5,123
5 to 9	4,123	5 to 9	5,393
10 to 14	2,970	10 to 14	4,972
15 to 19	2,986	15 to 19	4,547
20 to 24	3,596	20 to 24	3,873
25 to 34	9,543	25 to 34	8,497
35 to 44	5,919	35 to 44	8,067
45 to 54	3,738	45 to 54	5,748
55 to 59	1,700	55 to 59	1,636
60 to 64	1,796	60 to 64	1,334
65 to 74	3,607	65 to 74	2,441
75 to 84	2,147	75 to 84	1,937
85+	662	85	728
Total	*47,905*		*54,296*

Table 2.1: Age Cohort for 55106 zip code.
(Bureau of the Census 1990, 2000)

Census and Demographic Information

According to census data, the population within the study area has increased from 1990 to 2000. In 1990 the study area contained 4,7905 people. By 2000 the study area's population grew by 6,391 people; a 13 percent increase.

The population of those 65 and older decreased by 20 percent between 1990 and 2000. However, the population of those 35-54 years in age grew by 43 percent, and currently accounts for 25 percent of the population of the study area.

In 1990, the population of school-age children (5-19 years old) was 10,079 people. The school-age population increased to 14,912 people, an increase of 48 percent.

	1990	2000	Difference
White	85.4%	58.3%	-27.1%
African American	4.3%	10.7%	6.4%
Native American	1.1%	1.7%	0.5%
Asian	7.4%	19.8%	12.5%
Hispanic	3.8%	10.4%	6.7%

Table 2.2: Race and Ethnicity for zip code 55106 *(Bureau of the Census 1990, 2000)*

Race/Ethnicity

The minority population increased greatly between 1990 and 2000 in the study area. The percentage of the population that is non-white increased from 15 percent in 1990 to 42 percent in 2000.

The Asian and Hispanic populations have grown by over 200 percent in the study area and the African American population has increased by nearly that much. The Asian population represents nearly 20 percent of the total population in the study area. African Americans represent nearly 11 percent of the total population and out of the total population a little over 10 percent are of Hispanic ethnicity. Although the 1990 dataset used for this analysis did not report multi-racial as a category, in 2000 4.2 percent of the population was reported as of 2 or more races.

Persons in Household	1990	2000
1 person	5281	4477
2 persons	5570	4089
3 persons	3112	2381
4 persons	2525	1934
5 persons	1138	1176
6 persons	523	674
7+ persons	361	1207

Table 2.3: Household information for zip code 55106 *(Bureau of the Census 1990, 2000)*

Households

Households with 5 or more people have increased within the study area between 1990 to 2000. Most significant is the number of households with 7 or more people, which has increased dramatically in the last 10 years, over 200 percent.

Of these households the number of female-headed households increased from 3,209 to 3,406 from 1990 to 2000.

In 1990 there were 6,244 households with children under 18 years of age. By 2000 this number had increased by 22 percent to reach 7,624. This means as of 2000, 41.2 percent of all households within the study area have children under the age of 18.

The increase in households with 5-7 persons indicates that there will need to be larger housing units to

Homeownership vs. Rental

The rental and homeownership rates have been relatively stable from 1990 to 2000 in the study area. In 1990, 62 percent of occupied housing units were owned while 38 percent were rented. By 2000, those numbers were 63 percent ownership and 37 percent rental.

Race	% Earning Less than Median Income
White	46%
Black	93%
Native American	73%
Asian	81%
Other	48%

Table 2.4: % of population earning less than the regional median income by race. *(Bureau of the Census 1990, 2000)*

Income

Although income data from the 2000 census is not available yet, some conclusions can be drawn based on a combination of demographic data from 2000 and income data from 1990.

Median household income in 1989 for the study area was $25,503. In 1989, 93 percent of Blacks and 81 percent of Asians were earning less than the median income. The high increase in these minority populations within the last 10 years suggests that the population of households with lower incomes has also increased.

In 1989, 32 percent of female-headed households were below the poverty level. The increase in female-headed households in 2000 again suggests that there has been an increase in populations with lower incomes.

In addition to the census data, the National Center for Educational Statistics provides data regarding the number of children who are eligible for free or reduced lunch, which in this study is used as an indicator of low-income households. The number of children in the study area who were eligible for free or reduced lunch in 1992 was nearly 66 percent and this increased to 68 percent in 1997.

In order to qualify for free lunch, the family income of the student must be 130 percent of the poverty line or below. Students from families with an income, which is 185 precent of the poverty line qualify for reduced lunch. Based on 2000 census data, the poverty line set at an annual income of $12,000. (Source: *National Center for Education Statistics*)

Niche Markets

Based on target market descriptions provided by Zimmerman/Volk Associates, Inc. in a 2000 market position analysis of four development sites in St. Paul and on the population and demographic data, the study area is characterized by three types of target markets. The increase in the population 35-54 and the dramatic increase in minorities within the study area imply the following types of niche markets in the study area. The following table indicates a description of the different niche markets, which are most likely found in the study area.

Table 2.5: Niche markets and their attributes
(Zimmerman Volk 2000)

Family Type	Household Type & Size	Age	Income Level	Housing Preference
Mulitcultural ·	Families w/lots of children · Single-parent families · 4+ persons	35-54	Middle	Older urban rowhouse neighborhoods
Black Urban ·	Families w/lots of children · Single-parent families · Primarily African American · 4+ persons	35-54	Lower to Middle	Rowhouses/Low-rise apts in older neighborhoods More than half own
Latino Urban ·	Families with children · Single parent families · Primarily Spanish speaking · 4+ persons	35-54 25-34	Lower to Middle	High rise and low rise apartments in older neighborhoods, Rowhouses Nearly 2/3 rent

	East Side		Study Area	
Type of Unit	**Units**	**% of All Units**	**Units**	**% of All Units**
Efficiency	9	10%	23	6%
Small 1 BR	(-)	(-)	60	16%
1 BR Apt	28	30%	138	36%
1 BR Duplex	3	3%	(-)	(-)
2 BR Apt	26	28%	116	30%
2 BR Duplex	14	15%	(-)	(-)
3 BR Apt	3	3%	36	9%
3 BR Duplex	8	9%	(-)	(-)
4 BR Unit	2	2%	10	3%

Table 2.6: Type of Rental Unit for the Eastside of St. Paul and the Study Area (St. Paul Pioneer Press)

Housing Type

The East Side offers a range of housing choices from efficiencies to a few larger units like 4 bedroom houses and duplexes.

- 58 percent of units listed were one or two bedroom apartments.
- 14 percent of units were three or four bedroom units

The study area is consistent with this East Side trend.

- 46 percent of the sample were one or two bedroom apartments
- 12 percent of the sample were three or four bedroom units

The East Side as a whole offers greater variety in housing type, as it offers 1,2 and 3 bedroom duplexes in addition to apartments. Although the study area does not offer many duplexes, there are small one-bedroom apartments available. Based on this analysis as well as the analysis of household census data, **larger units are needed in both the East Side and the study area .**

	East Side		Study Area	
Type of Unit	*Min*	*Max*	*Min*	*Max*
Efficiency	$400	$595	$430	$450
Small 1 BR	(-)	(-)	$565	$565
1 BR Apt	$525	$675	$550	$585
1 BR Duplex	$475	$575	(-)	(-)
2 BR Apt	$625	$825	$600	$685
2 BR Duplex	$600	$950	(-)	(-)
3 BR Apt	$900	$1,050	$760	$950
3 BR Duplex	$985	$1,200	(-)	(-)
4 BR Unit	$1,475	$1,700	$1,090	$1,090

Table 2.8: Race and Ethnicity for zip code 55106 *(Bureau of the Census 1990, 2000)*

Current Rental Prices

Rent Prices

Rents on the East Side range from $400 per month for an efficiency apartment to a maximum of $1700 per month for a 4-bedroom unit. The minimum rent found in the study area is $430 per month for an efficiency apartment to $1090 per month for a 4-bedroom apartment. Overall maximum rents are lower in the study area compared to the East Side. Minimum rents in the study area are slightly higher for efficiency apartments and 1-bedroom apartments, and significantly lower for 4-bedroom units.

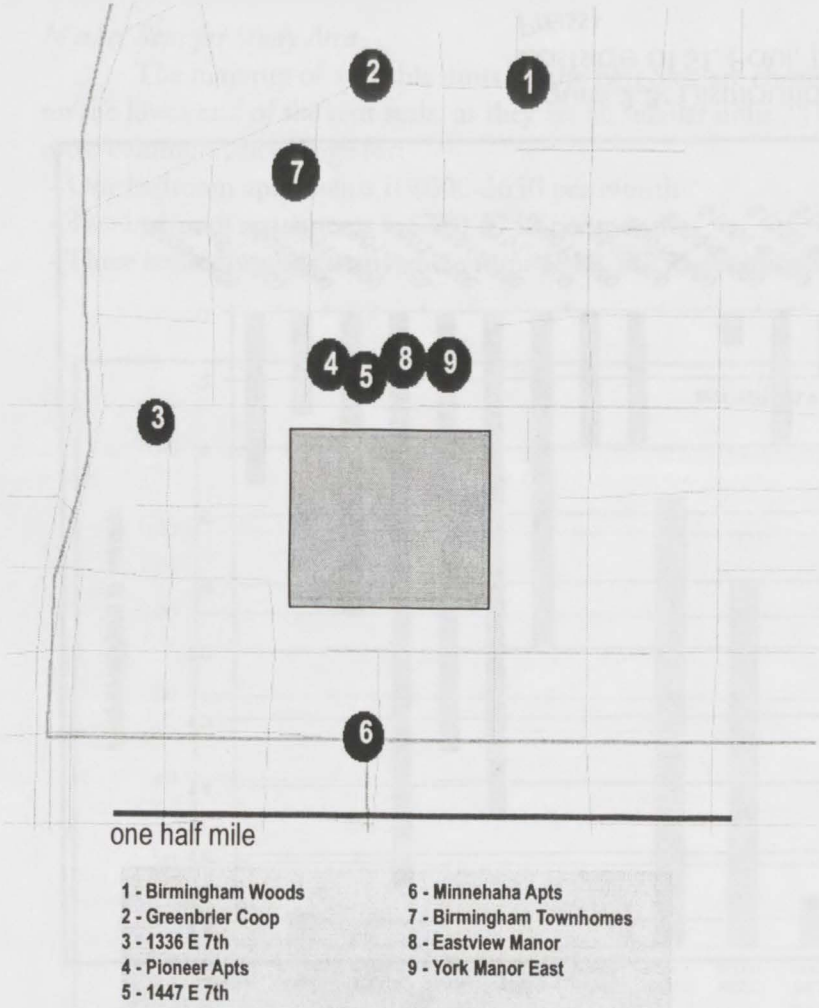


Figure 2.2: Location of nine identified apartment buildings near project site. (*survey by author*)

Greenbrier Coop	
(9) 3 BR	$760
(7) 2 BR	$675
Birmingham Woods	
(4) Efficiency	$450
(27) 1 BR	$575
(27) 2 BR	$675
(27) 3 BR	$950
(10) 4 BR	$1,090
York Manor	
(19) studios	$430
(60) small 1 BR	$565
(89) 1 BR	$585
(70) 2 BR	$685
Pioneer Apts	
(22) 1 BR	$550-$575
(12) 2 BR	$600-$625

Table 2.9: Sample of four of nine identified apartment buildings near project site. (*survey by author*)

Marker Rents for Eastside

A frequency distribution was generated for both the East Side and the study area to approximate current market rents per unit size. The number of units for each category is higher for the study area because they are based on number of units per apartment building rather than number of available units on the East Side.

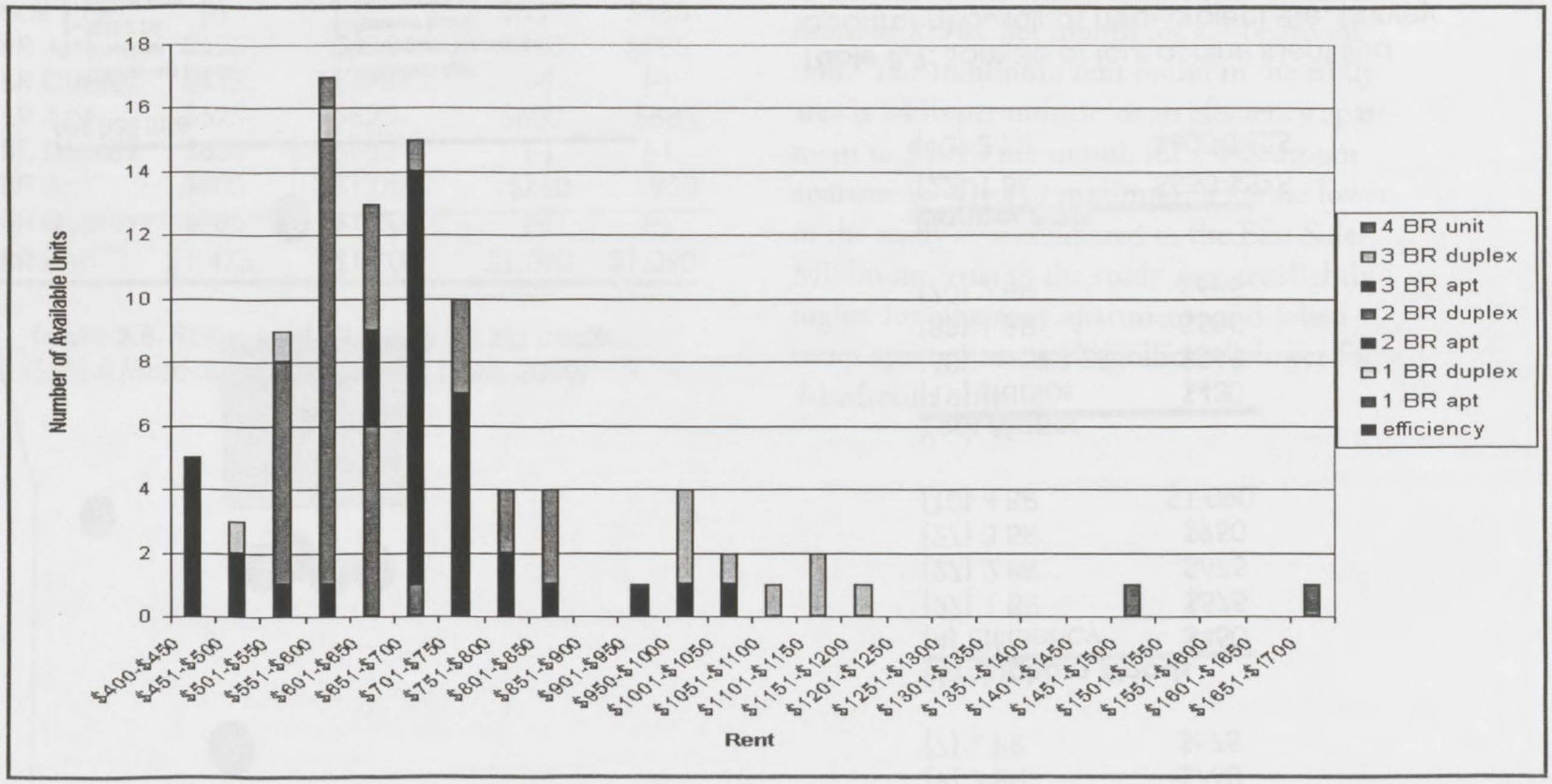


Figure 2.3: Distribution of Market Rents on the Eastside of St. Paul. (*source: St. Paul Pioneer Press*)

Market Rent for Study Area

The majority of available units on the East Side are clustered on the lower end of the rent scale, as they are all smaller units. The most common price range for:

- One bedroom apartments is $600-$650 per month
- Two bedroom apartments is $700-$750 per month
- Three bedroom units is anywhere from $950-$1250 per month

In the study area the rents per month are slightly lower than the East Side.

- One bedroom units are approximately $100 less per month ranging from $550-$600 per month
- Two bedrooms are $50-$75 less per month ($650-$700)
- Four bedroom units are approximately $500-700 less per month.

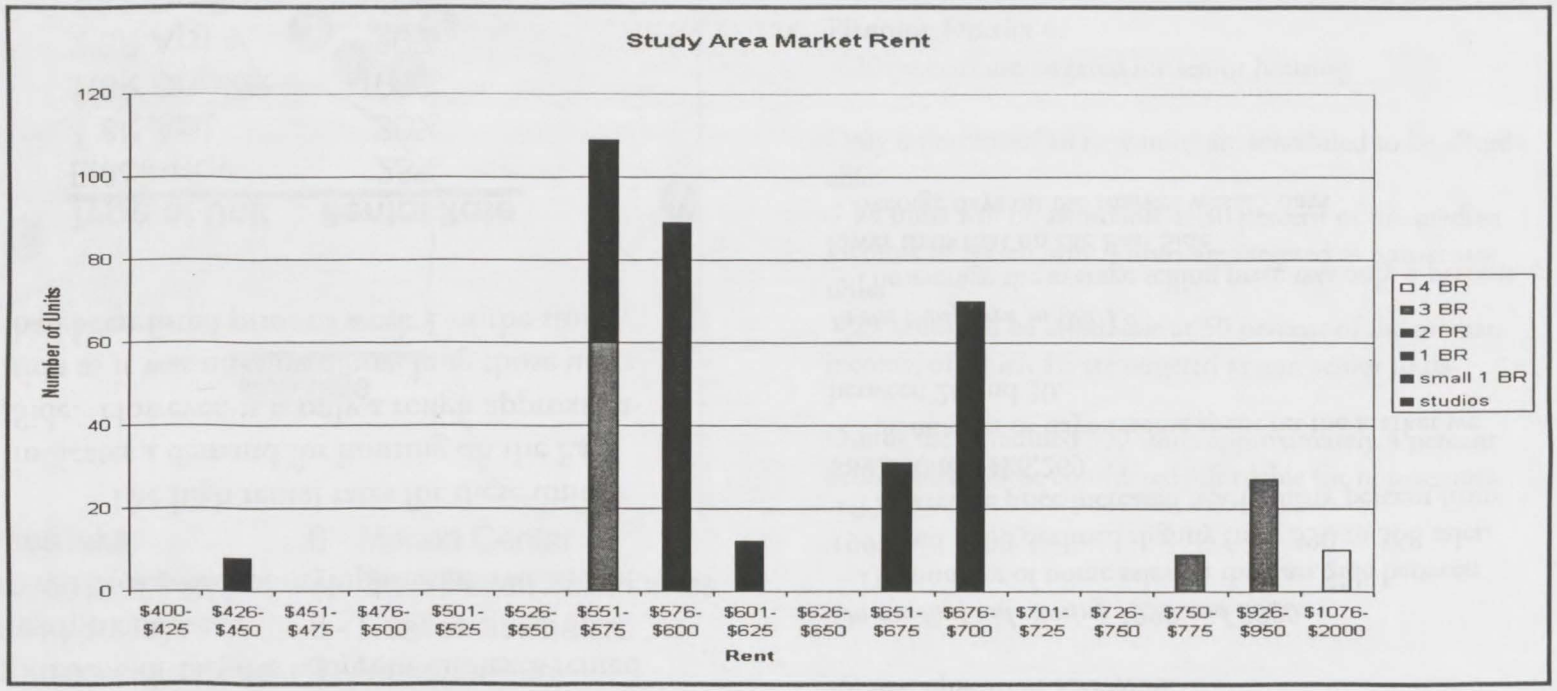


Figure 2.4: Distribution of market rents within the study area. (*survey by author*)

Abosrbtion Rate

Rental rates were calculated for the East Side, as there was no data available for the study area. Using the classified ads in the St. Paul Pioneer Press, units were compared between two consequtive weeks(Table 2.10).

- 100% of 1 and 2 bedroom duplexes rented within one week
- 60% of 3 bedroom duplexes rented within one week

The high rental rates for these units indicates a demand for housing on the East Side. However, it is only a rough approximation as it was unknown how long those units had been listed prior to week 1 of the study.

Type of Unit	Rental Rate
Efficiency	25%
1 BR Apt	30%
1 BR Duplex	100%
2 BR Apt	20%
2 BR Duplex	100%
3 BR Apt	33%
3 BR Duplex	60%
4 BR Unit	50%

Table 2.10: Abosrbtion Rate of vacant rental units after one week

Home Sales Prices

In 2000-01, the St. Paul Brewery Project sold town homes for close to $200,000 in 2001, while houses in St. Paul on Summit Hill and Macalester Groveland were quoted upward of $300,000.

On the East Side during 1999 and 2000:

- The number of home sales on the East Side between 1999 and 2000 declined slightly from 390 to 368 sales.
- The average price increased nearly thirty percent from $89,900 to $126,269.
- The number of days a home spent on the market we between 28 and 30.

In the study area in 2001:

- The average the average selling price was only 4 percent lower than that on the East Side
- Average days on the market was 25 days

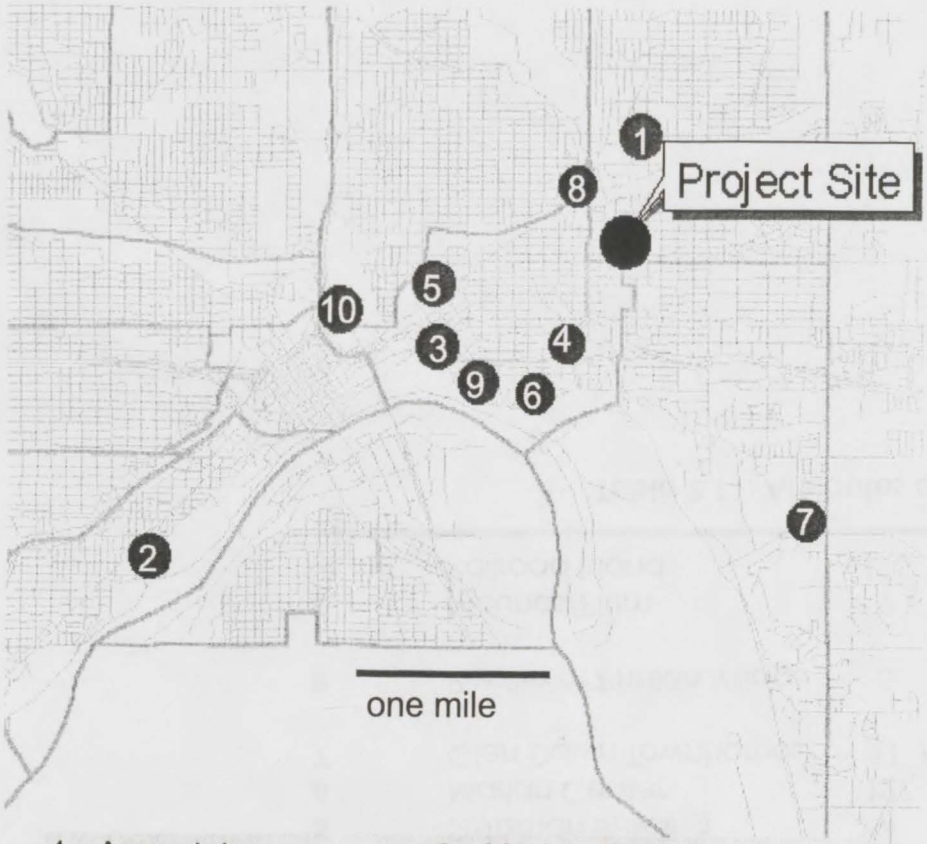


Figure 2.5: Location of competitive projects in the City of St. Paul.

Competitive Projects

On the East Side of St. Paul there are 5 rental housing developments and 4 ownership housing projects that are proposed or under construction (Table 2.11).

- 557 total number of units[338 rental and 219 ownership]
- Nearly 50 percent are scheduled to be located in St. Paul Planning District 4.
- 30 percent are targeted for senior housing

Only 8 percent of all new units are scheduled to be affordable.

- 18 units will be affordable at 30 percent of the median income, of which only 6 units are targeted as non-senior units
- 29 units will be affordable at 50 percent of the median income, of which 16 are targeted as non senior units

Out of the scheduled 557 units approximately 4 percent or 22 units will be considered affordable for non-seniors.

Map #	Name	Units	Descripton	Affordability
1	Ames Lake	77	Rental	
2	Brewery Project	N/A	N/A	
3	Homes for Learning	16	Rental	3 @ 30% 2 @ 50%
4	Johnson Parkway	114	Senior Rental	
5	Stutzman Building	4	Rental	
6	Marian Center	127	Senior Rental	12 @ 30% 13 @ 50%
7	Glen Dawn Townhomes	11	Family townhomes Ownership	
8	Realife at Phalen Village	5	Senior Coop Ownership	
9	Mounds/Plum	9	Ownership	3 @ 30% 2 @ 50%
10	Railroad Island	115	Ownership	12 @ 50%

Table 2.11: Attributes of Competitive Projects

Conclusion

The census data indicates a dramatic increase in populations, which tend to have lower incomes such as minorities, larger households, and female-headed households. There are very few rental units available for larger households. In the study area there are 10 four-bedroom apartments, but their vacancy is not known, and on the East Side only 2 four-bedroom units were listed as vacant.

Additionally, these populations will not be able to afford to purchase a home, whose average sales price on the East Side is well over $100,000, and is only slightly less in the study area. The fact that vacant units are typically rented out within one week indicates that there is a demand for housing on the East Side.

Current and proposed projects appear to address a need for senior housing rather than affordable housing for larger families. The census data shows that a significant population in the study area is larger families. The increase in the population of school-age children within the study area suggests a need for housing for families with children rather than housing targeted for seniors.

The Metropolitan Council has defined an affordable house at $170,000, which is an increase from the $134,250 price, which had previously been considered affordable. This means that a family of 4 making 80 percent of the median income can afford a house without spending more than 30 percent of their annual income. Census data indicates that a $170,000 home will not be affordable to residents of the study area.

The census data in concordance with the housing market information indicates a need for larger units at an affordable price in the study area. To accommodate the niche markets, which were identified by analyzing demographic trends and other existing data sources, rowhouses seem to be the preferable development option. Based on the niche market descriptions a mix of owner and rental units is prefered.

Existing Site Conditions

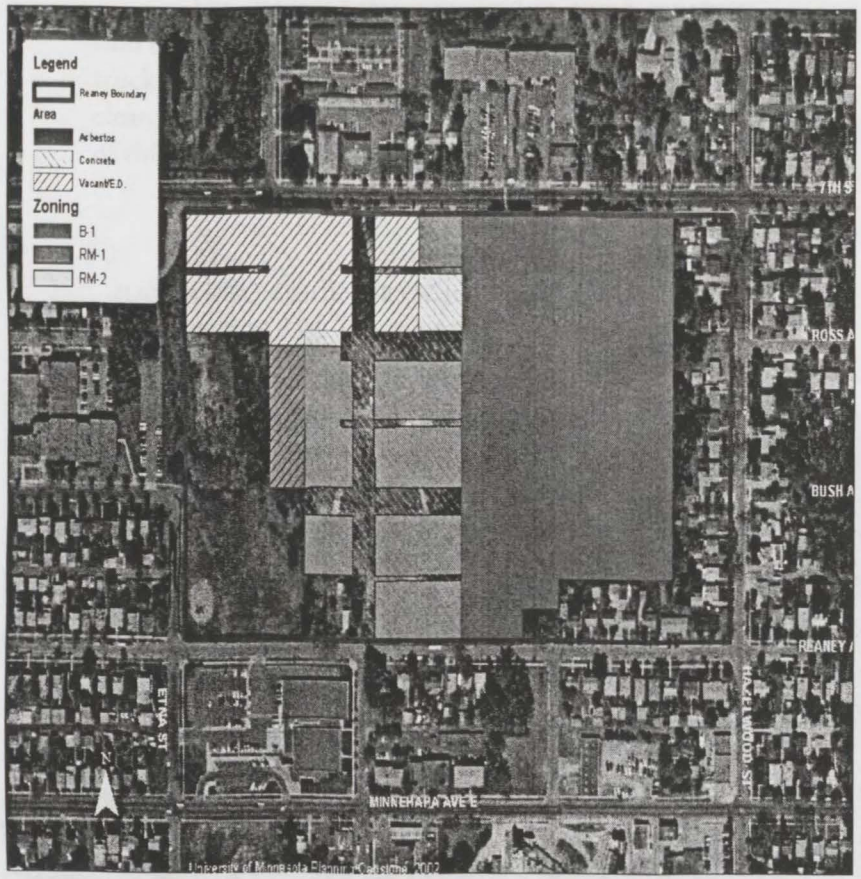


Figure 3.1: Zoning of Project Site (*St. Paul Zoning Code*)

Zoning

The site contains three zoning classifications:

- Residential Multi-Family 1 (RM-1)
- Residential Multi-Family 2 (RM-2)
- Commercial (C)

Approximately 14.9 acres of the site is zoned RM-1. This zone has a three floor height limitation. The number of rooms allowed on this property is determined by taking the square foot of the parcel and dividing by 900 square feet per room. For this site there are a total of 721 rooms allowed, or 180 units based on three bedrooms per unit (units are considered to have one room in addition to the bedrooms).

Approximately 3.8 acres of the site is zoned RM-2. This zone has a five floor height limitation. The number of rooms allowed on this property is determined by taking the square foot of the parcel and dividing by 600 square feet per room. For this site there are a total of 276 rooms allowed, or 69 units based on three bedrooms per unit.

Therefore, there are a total of 249 dwelling units allowable on this site.

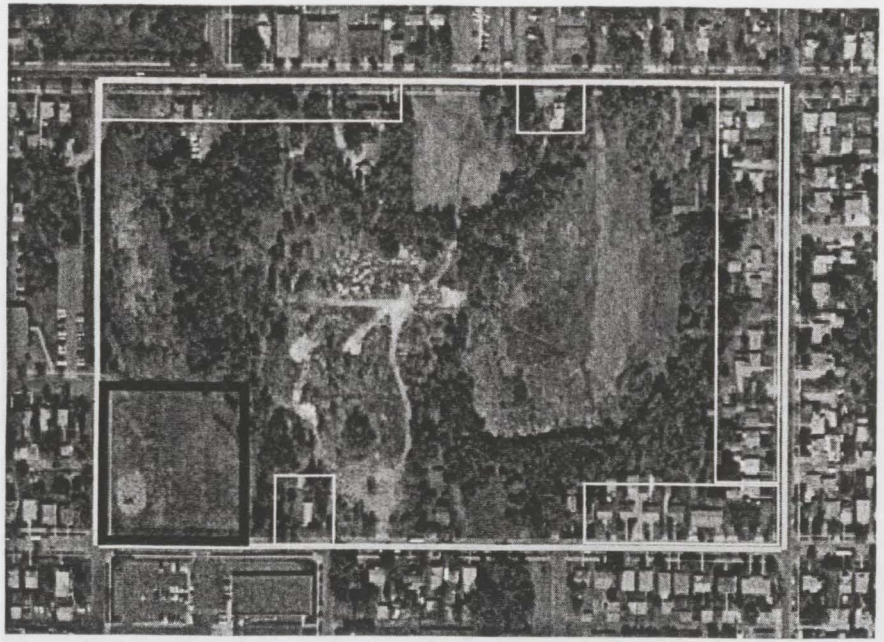


Figure 3.2: Land Use of Project Site. The yellow denotes single family residential areas and the green denotes active recreation.

Land Use

The existing land use on the site falls into three categories: single-family dwellings, active recreation space and green space.

The north side of the parcel and the east side of the parcel contain single-family dwellings one tier deep. These dwellings abut the street on the street side and the green space area on the rear side. There is one additional single-family dwelling on the south of the parcel. This dwelling abuts the road and green space as well but is also adjacent to an active recreation area to the west. This area is a playground for an elementary school.

Contamination

The site was previously used to dump construction debris. Additionally, the site was used by concrete trucks to dump leftover concrete and also as a place to clean their vehicles. The approximate areas in which both of this contamination occurred is indicated in Figure 3.3.

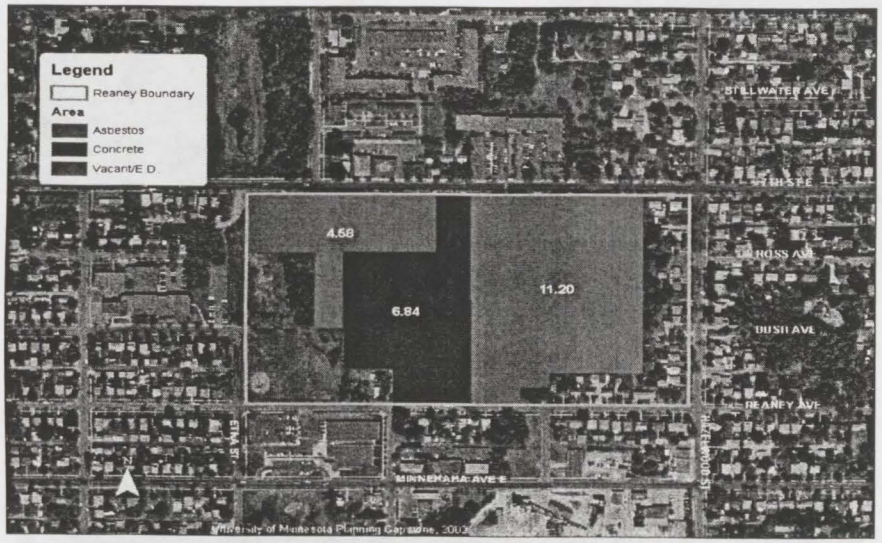


Figure 3.3: Contamination on Project Site (*St. Paul Zoning Code*)

A Phase II environmental site assessment investigation was done by Braun Intertec for Guptil Contracting in January of 2002. This study attempted to define the areas of contamination by digging test pits. Sixteen pits were dug and fourteen samples were taken.

The report concluded that the site contains extensive mixed demolition debris with asbestos and chemical impacts and is currently unsuitable for housing construction. The report concludes that the demolition debris is not homogeneous and is very difficult to precisely define. It is suggested in the report that this area may be suitable for paved parking or as greenspace. The MPCA has indicated that, to use any of the property being considered in this study, a four-foot granular fill cap would need to be applied to the entire asbestos contaminated area.

Concrete contamination presents a different set of problems. Some of the concrete areas may be suitable for building on, but other areas would need more extensive testing before a building could be placed. Additionally, the test pits were unable to penetrate some of the concrete areas and so the depth of the contamination is not known. If additional testing revels that this concrete would need to be removed, the expense of doing so could be prohibitive. Concrete in this state is not a hazardous material and therefore there are no overriding mandates from pollution control agencies for removing it. The existence of the impervious concrete makes stormwater management on site difficult.

There is some overlap between the two general types of contamination. It is likely that some of the asbestos contamination is buried beneath or contain within concrete.

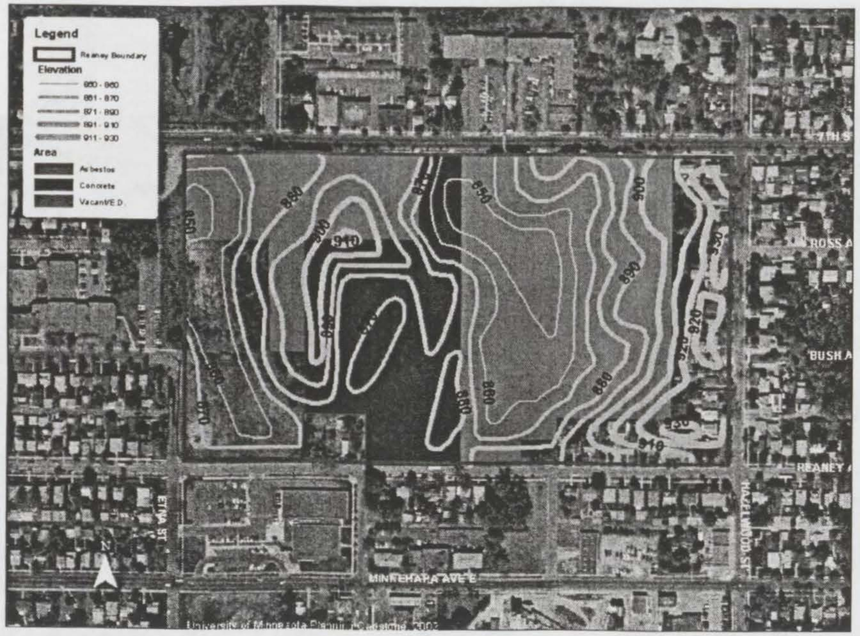
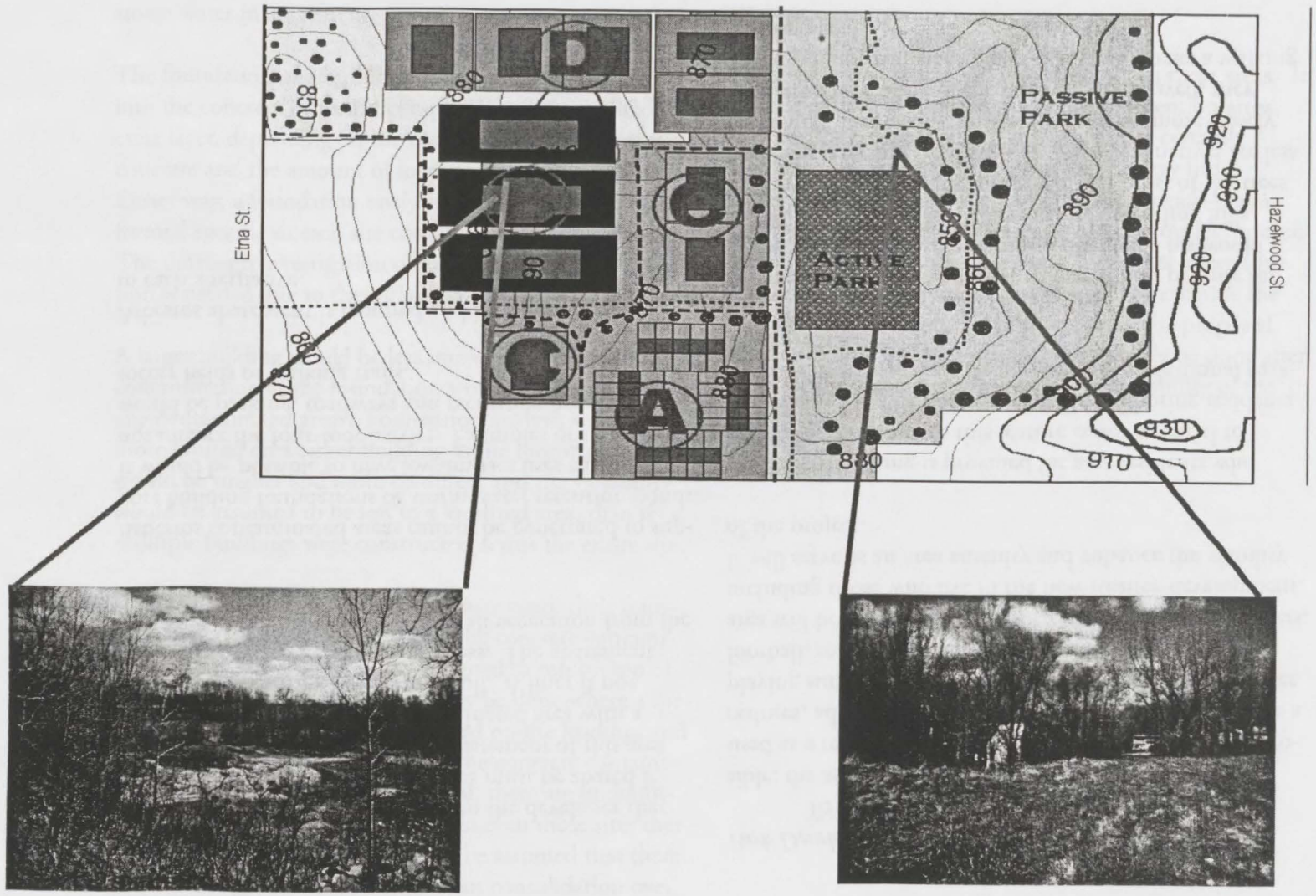


Figure 3.4: Topography and Contamination on Project Site (*USGS*)

Topography

The site topography presents an obstacle to developing the site. According to the best available contour mapping, there is a 60-foot difference in elevation between the highest points on the parcel and the lowest point. A slight ridge runs through the concrete contamination area. The asbestos contamination property to the east and the school property to the west are both significantly lower in elevation. The general stormwater flow is therefore from a potential building site and into the asbestos contamination area or the school property. Development will increase the amount of runoff, which will need to be handled before it is shed to these adjacent areas. The dramatic elevation difference also prompts the need for a significant amount of grading to make the site usable.

Proposed Improvements



Asbestos Abatement

The MPCA has indicated to the developer that the area contaminated with asbestos must be abated if any of the site is disturbed. The abatement of this area involves covering all of the contaminated area with a minimum of four feet of granular fill. A liner is not required with this abatement process. The abatement process will require the removal of all vegetation from the contaminated areas.

Asbestos contaminated areas cannot be penetrated to support building foundations or storm water retention ponds. It would be possible to have low-impact uses that would not impact the four-foot barrier. Examples of such uses would be parking, roadways and recreation areas such as soccer fields or walking trails.

Asbestos abatement is required and is therefore included in each alternative.

Park Development

To make the project socially and politically feasible, the asbestos contaminated area is proposed to be used as a recreational amenity. Following abatement procedures, additional fill and grading is proposed to create a playing surface to accommodate a playing field for soccer, football, softball or other team sports. The recreation area will be accessible to the surrounding property owners, including those who live in the new Reaney development. It will serve as an area amenity and enhance the viability of the project.

Additional parking is provided for area residents who use the park, although this feature is not essential to the amenity and can be removed if neighboring residents and/or decision makers do not desire the additional parking.

Also considered is an alternative that would provide for a more passive form of recreation on-site. This would include such things as walking trails or sledding hills. Unfortunately, since it is projected that most of the trees are being removed from the site, these alternatives are less appealing. If the contaminated areas were more closely defined so that some of the trees could be saved, they would provide some aesthetics that could make a walking trail viable.

A passive recreation alternative would be considerably lower in cost as the substantial amount of fill needed to level an active recreation site would not be needed.

Concrete Abatement

The concrete contaminated areas are a burden to the construction of dwellings and also to construction of storm water management.

The foundation of a building would either be drilled into the concrete or would completely penetrate the concrete layer, depending on the compressive strength of the concrete and the amount of loading from the structure. Either way, a foundation analysis would need to be performed specific to each site contaminated with concrete. The thorough investigation of each proposed bearing location is needed due to the variability of the concrete.

A larger building would be less impacted by the concrete contamination as the foundation would likely penetrate any contaminated areas. Foundation analysis would be more limited on a larger building as the footprint itself would be smaller and more confined, and the variability would be assumed to be less in a localized area, than if multiple buildings were constructed across the entire site.

If multiple smaller buildings are constructed, their foundations may or may not penetrate the concrete contamination. Some would likely be designed to rest on top of the concrete areas. This should only be done where a specific design has been developed based on the loadings and analysis of the specific area. Since the concrete contamination was essentially waste material, there are undoubtedly pockets of weak material within even those sites that appear hard-packed. It should not be assumed that these areas will support a structure without consolidation over the long-term.

Roads and parking areas as well as walking trails can be constructed in areas identified as contaminated by concrete.

Stormwater management will be difficult in these areas. It will be possible to construct stormwater retention areas, however the permeability of the concrete is certainly extremely low and therefore there will be very little groundwater recharge from the site. This means that a extremely large pond will be required or an outlet for each retention area would be necessary. The other alternative to do stormwater retention on the site is to excavate the concrete contamination from underneath the proposed pond. This would be costly and should only be done after additional soil analysis confirms the permeability of the underlying soil layers.

Concept Design of Project Site

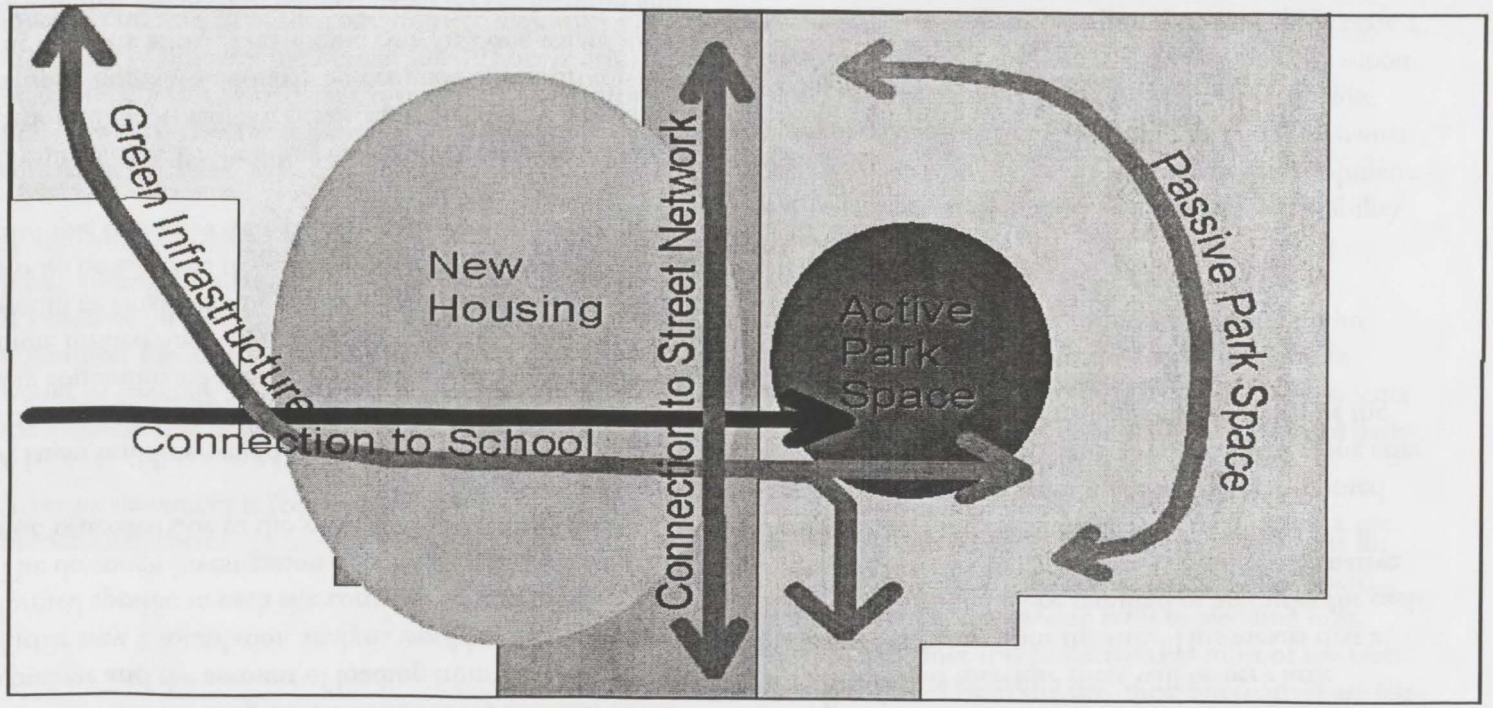


Figure 4.1: Concept design for the project site.

Concept Design

Each of the site plan options developed was based six goals: (1) construction of new affordable housing with a mix unit types, (2) providing active and passive park space, (3) connecting park space to the elementary school, (4) reconnecting the park space to the existing greenways outside the boundaries of the study site (5) maintaining connections to the existing street network. (Figure 4.1)

The new housing proposed is based on providing suitable units to serve the needs of larger families. Units are assumed to include an average of 3-bedrooms each. The lot size and footprint are based on an average unit size of 1,500 square feet including common space such as hallways and maintenance areas. Each of the following plans is feasible under the current zoning limitations. A greater variety of unit sizes within buildings will likely encourage faster rental absorption rates and is highly encouraged.

The addition of park space is intended to provide an amenity to current and future residents while reducing landscape maintenance costs and responding to environmental threat posed by the asbestos contamination. Currently there are few neighborhood parks in the area. The park is assumed to include both active recreation space such as soccer fields and passive conservation areas with walking trails. Connecting the park space to the Parkway Elementary School west of the site boundary as well as the green corridor between Lake Phalen and the Mississippi River crossing diagonally through the site will promote both the active and passive uses in the park. (See Elizabeth Clemens Parkway Elementary School Proposed Wetland Park, Landscape Architecture, Cornell University, April 1999.)

Extending the existing street network into the site will integrate the new construction with the existing uses. Use of the streets and trails to create sight lines to the park area is encouraged.

Each of the site plans identifies building areas and building types based on the design concept outlined above. While individual lots and footprints are provided to demonstrate feasibility under existing zoning ordinances, use of planned unit development (PUD) to cluster buildings and increase the open space and connection to the green corridors is highly encouraged.

Active and passive park space is provided on the eastern side of the site in each of the three options. A network of walking trails and the new interior streets provide connections to the park. It is expected that many of the existing trees will need to be removed during the remediation of the asbestos. Replanting of trees is vital to linking the green corridor northwest of the site to the park. Replanting of trees along the back edge of the houses on the eastern edge of the site will provide a buffer between the houses and the park space. Additional trees should be planted along the walking trails to separate the active and passive park areas.

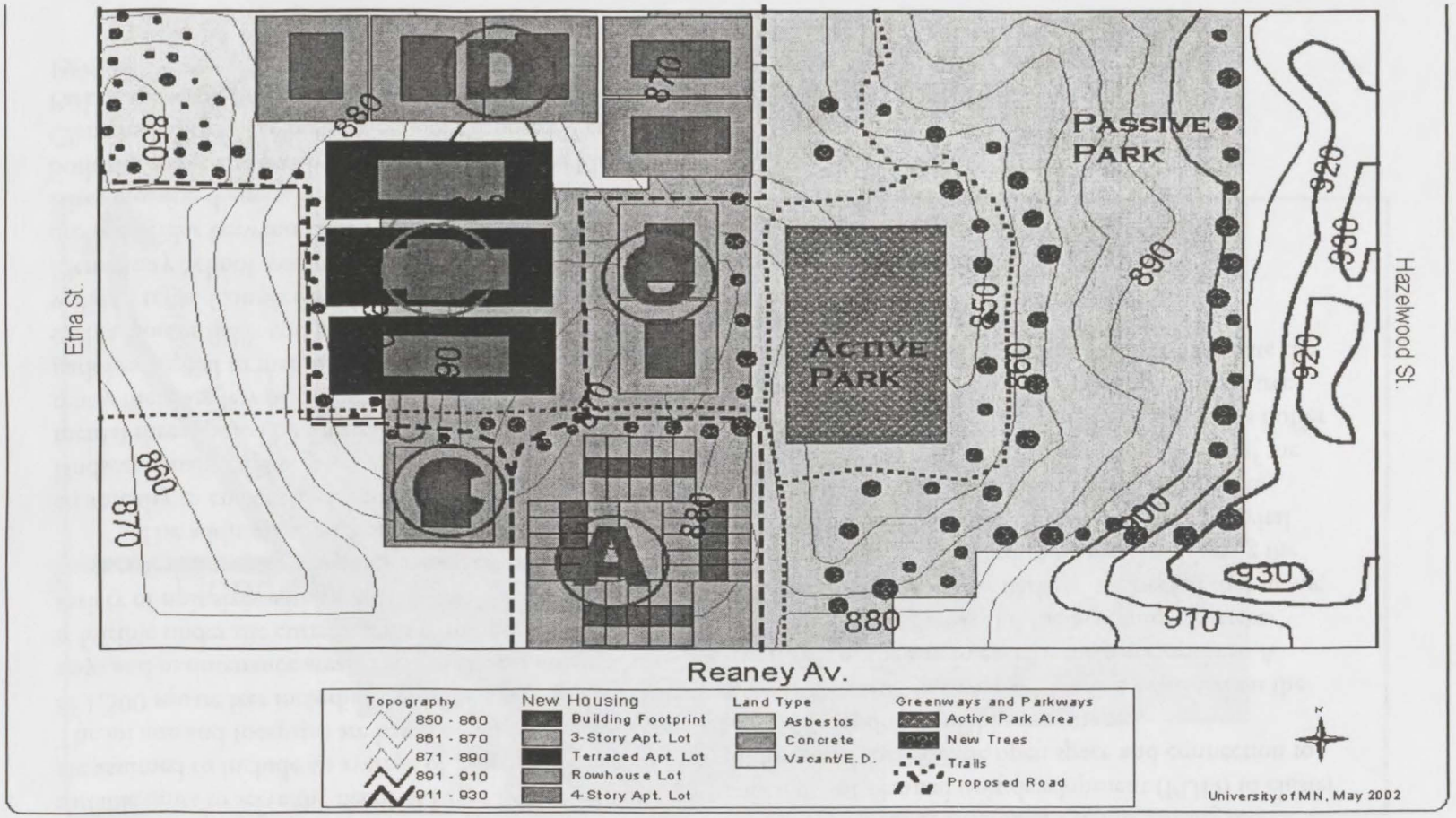


Figure 4.2: Proposed site layout **option1** for the project site.

Option 1:

Type	*Bldgs*	*Living Units*	*Lot size(sq. ft)*	*Lot(Acres)*	*Map ID*
row house	20	20	50,000	1.15	A
garden apt. (terraced)	3	18	90,000	2.07	B
low-rise apt. (3-story)	3	36	48,000	1.10	C
mid-rise apt.(4-story)	5	80	100,000	2.30	D

option 1

This site plan emphasizes a diversity of housing types with a higher intensity of new construction along East 7th Street. The plan suggests adding five four-story rental apartment buildings along East 7th Street to take advantage of the higher densities permitted as of right according to the RM-2 zoning designation. Three terraced rental apartment buildings taking advantage of the rising slopes in the interior of the site will provide scenic views of the park. East and South of the terraced apartments at a lower altitude, sit three 3-story rental apartment buildings. The use of a PUD to cluster buildings thereby increasing the open space and connection to the green corridors is highly encouraged. A block of owner-occupied row houses is proposed on the southern boundary. The construction of a limited amount of for-sale units will enable the developer to borrow a greater amount of funding to finance the construction of the rental and affordable units. It is assumed that all parking will be placed under the units. This plan also provides the greatest connectivity to the existing street network with intersections at East 7th Street, Etna Street and Reaney Avenue. This site plan provides the greatest variety of housing types and would require the demolition of five houses along East 7th Street. It is considered the least politically feasible option.

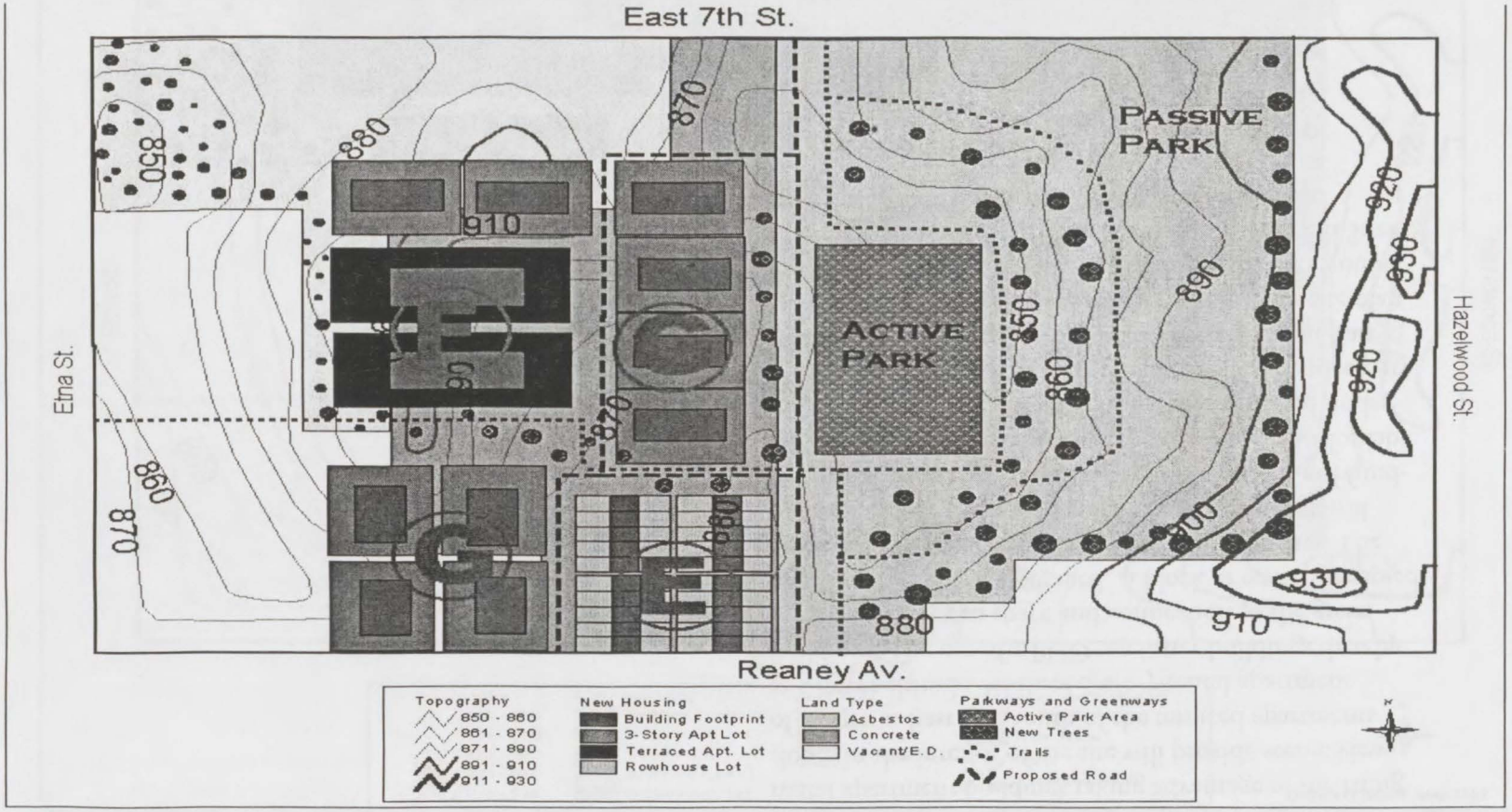


Figure 4.3: Proposed site layout **option 2** for the project site.

Option 2:

Type	*Bldgs*	*Living Units*	*Lot size(sq. ft)*	*Lot(Acres)*	*Map ID*
row house	20	20	50,000	1.15	E
garden apt. (terraced)	2	12	60,000	1.38	F
low-rise apt. (3-story)	10	120	160,000	3.67	G

option 2

This site plan also emphasizes a diversity of housing types in the interior of the site and along the southern border. The plan suggests adding six 3-story rental apartment buildings in the interior of the site as well as four 3-story rental apartment buildings on the southern border of the site. The increase in apartment buildings relative to option 1 reflects the lower densities permitted by right according to the RM-1 zoning designation. Two terraced rental apartment buildings taking advantage of the rising slopes in the interior of the site will provide scenic views of the park. The use of a PUD to cluster buildings thereby increasing the open space and connection to the green corridors is highly encouraged. A block of owner-occupied row houses is proposed on the southern boundary. It is assumed that parking will be placed under the units. This plan emphasizes the traditional grid pattern found in the existing city streets network with intersections on East 7th Street and Reaney Avenue. This site plan provides a more limited variety of housing types and would require the demolition of one existing house on Reaney Avenue. It is considered politically feasible.

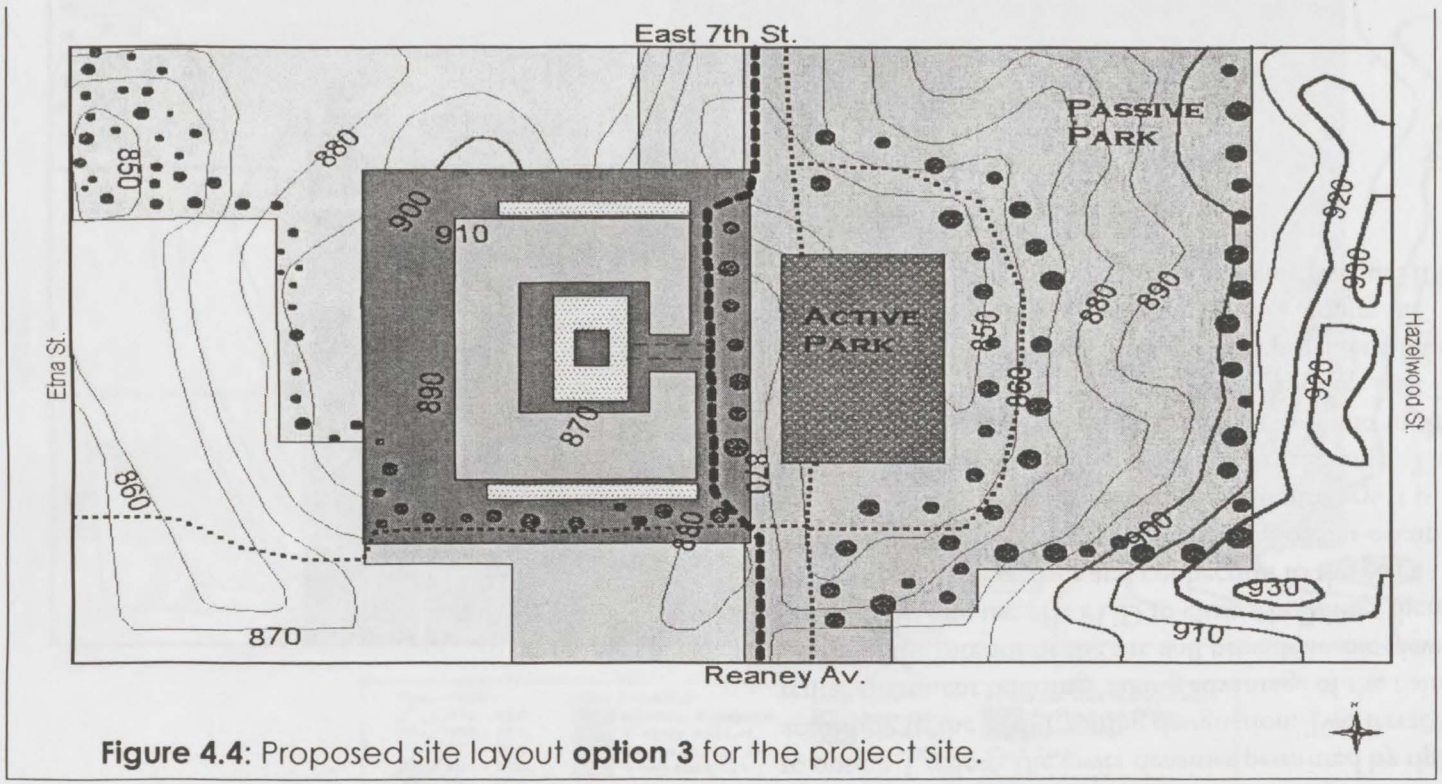


Figure 4.4: Proposed site layout **option 3** for the project site.

Option 3:

Type	Units/Floor	Est. S.F.*	Floors	Livable Area (sq. ft.)	Living Units	Lot size (sq. ft.)	Lot (Acres)
3-story walkup apt.	50	1,500	3	225,000	150	250,000	5.74
Surface parking	225	120	1	27,000		27,000	0.62

Option 3

The first option presented would be to construct a single building containing 250 units. The single building would be located almost entirely in the concrete contamination area.

It would be served by 225 parking stalls that would partially surround the building with the remainder contained in an internal courtyard. A new roadway connects the development to the surrounding transportation network.

This alternative provides excess earthwork material from the building site that would be used in the asbestos abatement areas. It also provides for the construction of an earthen berm between the new building and the school property. The berm will serve as a buffer between the two properties and will assist in stormwater management.

This alternative also provides for many opportunities for green space preservation and buffering to adjacent properties. It is designed to provide occupants with access to an internal green space area as well as access to the adjacent park property. Further, it is designed to maintain the green corridor that exists in the north/south direction. The building itself is well buffered from each direction through the use of earthen berms and also vegetation.

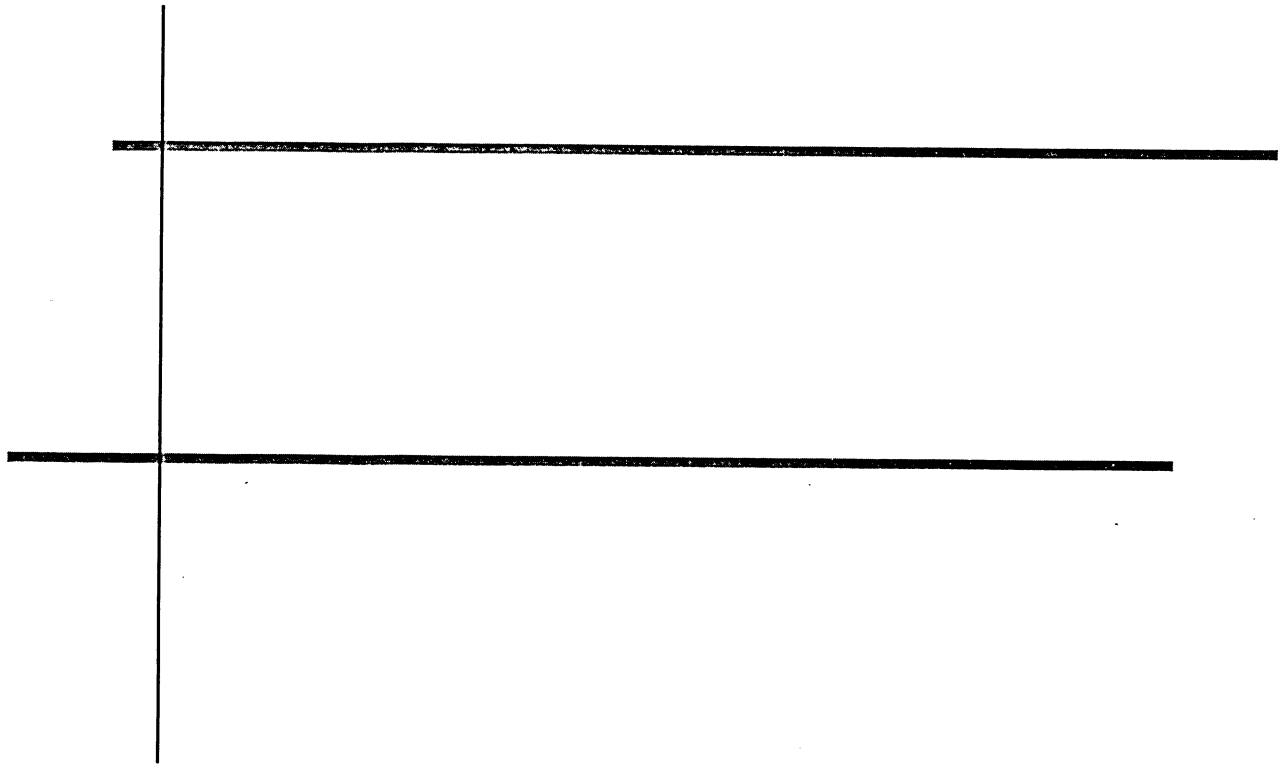
The creative use of different exteriors and varying setbacks is encouraged to create the perception of multiple buildings. Greater architectural detail such as an archway leading to surface parking hidden in the center of the building is recommended to create a unique sense of identity for the structure. Limited additional guest and overflow parking is available on the north and south side of the building. This plan bisects the site with a single road between East 7th Street and Reaney Avenue.

Number	Item	Amount	Unit	Unit Price	Cost
1	Mobilization	1	L.S.	$20,000	$20,000
2	Clear and Grub	6	Acre	$2,500	$15,000
3	Common Excavation	68,000	C.Y.	$3.50	238,000
4	Granular Borrow	320,000	C.Y.	$7.00	$2,240,000
5	Topsoil	4,500	C.Y.	$14.00	$63,000
6	Seeding	10	Acre	$4,000	$40,000
7	Mature Trees	150	Each	$500	$75,000
8	Bituminous	2,900	Ton	$36.00	$104,400
9	Aggregate	1,900	C.Y.	$18.00	$34,200
10	24" RCP	1,200	L.F.	$60.00	$72,000
11	Drainage Structure	10	Each	$4,000	$40,000
12	10" Watermain	1,300	L.F.	$25.00	$32,500
13	10" Sanitary Sewer	1,300	L.F.	$35.00	$45,500
14	Sanitary Sewer Manhole	6	Each	$5,000	$30,000

Total of Unit Items	$3,049,600
Engineering, Surveying, Geotechnical Work (15%)	$457,440
Subtotal	$3,507,040
Contingency (10%)	$350,704
TOTAL ESTIMATED COSTS	**$3,857,744**

Table 4.1: Cost Estimates for site preparation on the project site

Blueprint



Condemnation

The first step in developing this site is to have the city condemn the blighted and polluted land and then grant the land to the developer. A member of the city council must initiate condemnation proceedings and the council as a whole as well as the mayor must approve the condemnation. A public hearing must be held. Property owners will be compensated at the assessed value of the property.

The site is currently in council member Kathy Lantry's seventh ward . The anticipated redistricting of the city counsel will not change this arrangement.

Public Purpose

In order for Kathy Lantry, the rest of the council and the major to consider backing condemnation it must be shown that this invasive government action will serve a compelling public purpose. The development must show it is a benefit to the public and that benefit outweighs the costs of burdening the respective individual property owners. Furthermore, the development should not be viewed as detrimental by the surrounding neighbors. Any public outcry against the proposed development will sap political support for the project.

The development will be a benefit to the public in a number of ways. First, the development will improve a blighted and hazardous area. The pollution on the site will be remediated. Currently, the site is open to the public and it is possible for the asbestos to be unwittingly disturbed, creating a public health hazard. For example, a garden has been recently tilled on the site. This unregulated behavior could easily have aerated unacceptable levels of asbestos. If the city does not step in, this threat to public safety will remain in the community.

The city's actions would help replace a neglected dangerous brownfield with green open space and soccer fields. As was pointed out earlier, this area of east St. Paul is lacking in open space and parks. The addition of over 10 acres in park space will be an asset to all members of the community. Furthermore, East St. Paul is lacking the active park space demanded by the changing population. The recreation centers in the area have a number of baseball diamonds, but there are not any soccer fields. There is a preference for soccer fields among the growing Hmong and Latino populations in the area. The development will help meet this otherwise underserved demand.
It has been shown that adding park space will increase property values in an area. Numerous communities from across the nation have discovered that park creation is a one-time investment that can boost property values and swell tax coffers (1). The return on the investment in park space often more than pays for the initial costs. Survey research continually shows homebuyers identify nearby open space as among the top features in choosing a home (2).

1 Lerner, Steve and Poole, William; The Economic Benefits of Parks and Open Space, The Trust for Public Land.
2 Garvin and Berens, Urban Parks and Open Space, 27. (American LIVES, Inc. 1996 survey). See also June Fletcher, "Home Buyers are Shunning Developers' Pricey Extras," Wall Street Journal (November 21, 1997), B16. (Market Perspectives Inc. 1997 survey) and Homebuyers Survey Update, October 1998. (American LIVES, Inc. 1998 survey).

Beyond the increase in value of preexisting neighboring properties, the development will directly increase the city's tax base by taking an underutilized property and turning it into a valuable residential area. All of the development scenarios will add 150 units of housing.

Half of those units will be affordable at 50 percent of the metropolitan median income. The provision of these affordable units as well as the overall addition of new housing units will help address the housing shortage in St. Paul. The building of new housing, particularly affordable housing, has been identified as a priority by the mayor and the city council. The mayor has set the goal of providing 5000 St. Paul housing units during the next four years. A number of potential development sites have been identified by the mayor (see map). While the Reaney development site has not been placed on the mayor's list, the mayor's office is open to additional proposals and many of the identified sites are only in their conceptual stage.

The provision of affordable housing also serves the public purpose of reducing student mobility. Currently, many underprivileged families in St. Paul have difficulty staying at the same address for a long duration of time. By constantly moving, the children in these families have to change schools frequently, resulting in a significant disruption of their education. By insuring an affordable rent, the affordable units in the Reaney development allow underprivileged families to stay in one location and have their children complete their education in a single facility.

Mitigating Concerns

A number of public purposes have been put forward to justify condemnation, but it should also be mentioned that any negative externalities that might stem from this development would be mitigated by the particular placement of the site. The site is largely buffered from the surrounding single-family housing. Multifamily apartments will neighbor the site to the north. Parkway Elementary School is the primary neighbor to the west. A post office is the primary neighbor to the south. And, while single-family houses border the park to the east, the park itself will serve as a buffer.

Increased traffic will surely be a concern among neighbors. The previous analysis of traffic counts in the community assets section showed that the existing road network is not overburdened and can accommodate the additional cars from 150 units. Furthermore, close access to the major arteries of 7th St., Minnehaha Ave. and Johnson Pkwy will insure that the traffic is easily dispersed and not funneled onto one roadway. The presence of public transit opportunities will also help mitigate traffic concerns.

Financing

Other than the required condemnation of the needed property by the city, the project will require sources of public funding in order to be financially viable. A number of different sources of public funding are available to the project. Table 5.1 of public funding sources available for housing projects and brownfield remediation is by no means comprehensive but identifies large multimillion dollar funding pools that could be tapped.

Public Funding Sources
> LIHTC *(Federal program administered through City and MHFA)*
> STAR funds *(City program)*
> HRA funds *(City program)*
> HOME funds *(City program)*
> HUD's Brownfield Economic Development Initiative
> Livable Communities Funds for brownfield remediation *(Metropolitan Council Program)*

Table 5.1: Applicable Funding Sources (survey by author)

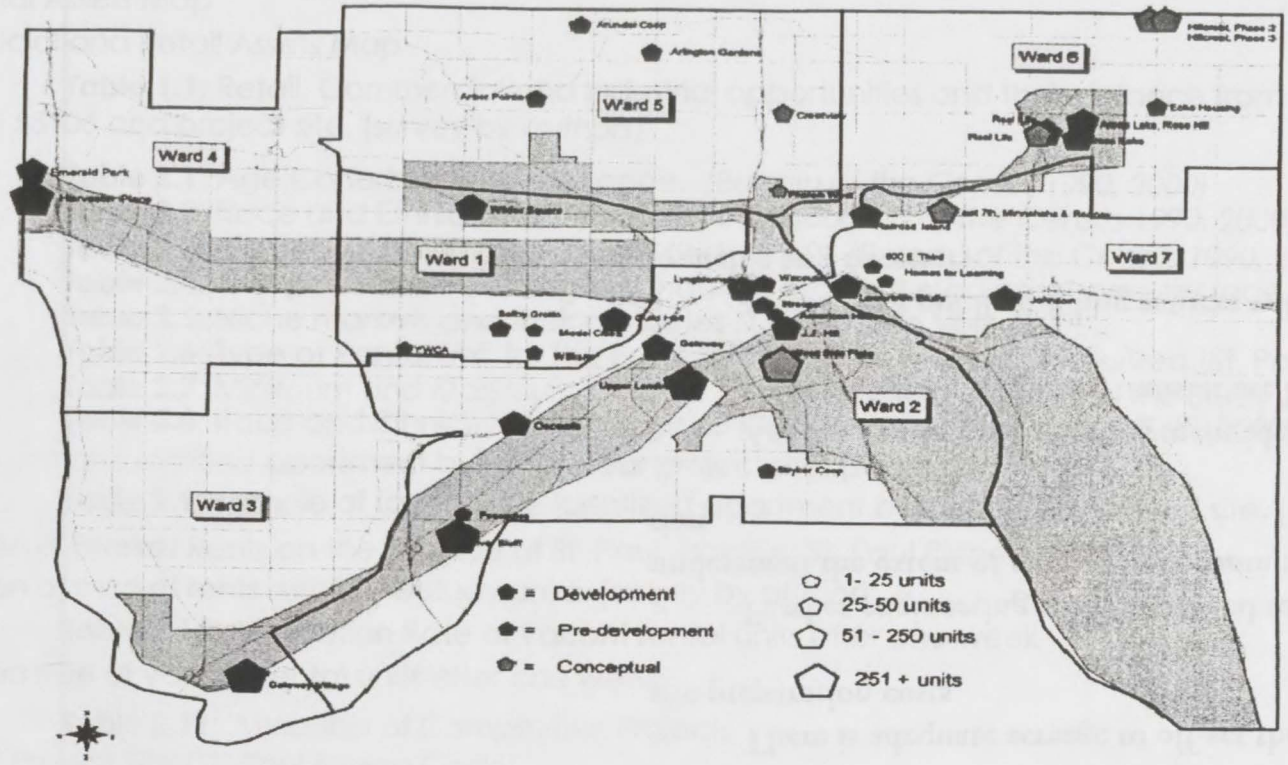


Figure 5.1: Housing projects identified in the St. Paul Housing Plan

Politics and Planning

Housing has become one of the primary concerns of municipalities in the Twin Cities. St. Paul Mayor Kelly recently committed to building a large number of housing units in the city. Many of these new units have been highlighted in the St. Paul housing plan (Figure 5.1)

This report examining the Reaney site in East St. Paul concludes that:

> There is adequate demand for housing
> Housing should be Multi-Family, with a mix of ownershipand rental

> There is adequate acreage to off-set the high site preparation costs

> Further engineering study is needed to better understand the extent of the concrete contamination

> Zoning concurs with development ideas
> Condemnation and Land transfer are both necessary
> A variety of public funding sources will be available and necessary

Figures

Tables