

A Restorative Elementary School for the Homeless Child

A THESIS  
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# the child

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## thesis

*For a child population that is homeless and in need of education, the restoration of an urban dilapidated building not only provides a stimulating and familiar backdrop for education, it signals a breaking of the cycle of decline that grips both the child and the building.*

Central to this thesis are the commonalities between the homeless child and the building chosen for this project, which sits on the southwest corner of third avenue and second street in downtown Minneapolis, Minnesota. Both are deeply rooted in the city. The city has pushed, pulled and formed them in multiple ways. Though differing greatly in age, both find themselves in a downward spiral: the quick deterioration of the physical building, once vacant and exposed to the elements; and the equally quick, but all the more alarming, deterioration of not only the physical, but also the mental characteristics of the child when exposed to the realities of homelessness in the city. These harsh forces of the city call to mind images of desolate streets with darkness, danger and hopelessness in every direction.

However, this thesis also suggests that by bringing the homeless children of Minneapolis and this building together, through a restoration project anchored in education, the forces of the city can also provide opportunities to rebuild the child and enrich the fabric of the urban center.

At the foundation of this restoration project resides the end user and therefore, an attempt will be made, in the following pages, to provide a basic understanding of the plight of the homeless child. This introduction to the primary occupant of this school will be followed by an examination of the curriculum proposed for this school project. This curriculum serves as the foundation for the architectural program, and will be the basis of design. Finally, the building will be introduced and explored. The combination of the homeless child, the curriculum and this vacant downtown building makes for an interesting urban project...*The Restoration School.*



the child

2

third avenue second street minneapolis, minnesota

the  
restoration

school

Since the early 1980's, the United States has seen a dramatic rise in homelessness. What was, prior to 1980, largely thought to be an isolated problem affecting mostly single, alcoholic men in large cities like New York or Chicago has become an epidemic inflicting a diverse spectrum of people for reasons much more varied than addiction. Of this rapidly growing population of homeless, children represent the fastest growing subgroup. According to the National Law Center on Homelessness and Poverty (NLCHP), each year more than 1.3 million children experience homelessness. The majority of these children are either members of homeless families or have been forced into homelessness by abandonment or abuse.

More than one-fifth of homeless preschoolers have emotional problems serious enough to require professional care, but less than one-third receive any treatment.

By the time homeless children are 8 years old, 1 in 3 has a major mental disorder.

Homeless children are sick at twice the rate of other children.



On any given day, 200,000 American children are homeless.

*The National Coalition for the Homeless.*

Homeless children have twice the rate of learning disabilities and three times the rate of emotional and behavioral problems of non-homeless children.

*The National Child Traumatic Stress Network*

figure 1.0: faces

Though the reasons for homelessness are varied and complex, the effects of homelessness, on the child are straight forward: the child becomes shattered. Broken by instability, stress, violence, and mental and physical illness, the child faces a dark world day after day.

According to the National Coalition for the Homeless, often, education, the one hope for putting the pieces back together, is out of reach for the homeless child. Residency requirements, guardianship requirements, delays in transfer of school records, lack of transportation, and lack of immunization records often prevent homeless children from enrolling in school.

Of the 602,586 homeless children able to enroll in school during the 2003-2004 academic year, 50.33% were living in doubled-up arrangements, and 25.33% were living in shelters. The remaining 24.33% were spread among emergency foster care, substandard housing, abandoned buildings and vehicles, motels, the streets, and unknown areas. (NCH Fact Sheet #10) Given these challenging living arrangements, survival takes precedents over school. Yet without an education, the child is often quickly pulled into the **cycle of decline**.

U.S. labor force statistics going back to the 1960's show the close correlation between education and unemployment. As discussed in the following pages, the homeless child is often denied the fundamental educational tools that are required for their future. Without these educational assets, this child is likely to continue to face increasingly unstable circumstances as they age.

This is the

**cycle of decline.**



figure 2.0: isolation

## cycle of decline

Through no fault of their own, homeless children often find themselves swimming in a violent vortex...a vortex that deepens at an alarming pace. Once homeless, children suffer from a variety of acute and chronic health problems. Anemia, dental decay, impaired vision, delayed immunization, lead toxicity and many other problems plague these children daily. Along with these health issues, homeless children also tend to suffer from delayed development. Homeless children have either been found to develop more slowly than housed children or to have specific developmental deficiencies such as receptive and expressive language, visual motor skills, and reading skills.

The deterioration of the health and developmental progress of the homeless child is often chronic due to the inability of these school-aged children to receive the education needed to break out of their downward gyre. This population of children suffers from disproportionately high levels of poor academic skills, erratic school attendance, large educational gaps and school failure. In addition, the above mentioned residency requirements, poor transfer of academic and health records, and program eligibility requirements all become exacerbated due to the homeless child's transiency.

On the corner of Third Avenue and Second Street stands a vacant building from a spent era. In it's day, this building served the thriving railroad industry as it moved goods throughout the upper mid-west and across the country. Those bustling days are behind this old Milwaukee Railroad building. It too now finds itself in a cycle of decline.

Both the child and building struggle within the same context...the urban city. This urban environment has witnessed the decline of both the proposed project site and these children, and may hold the seeds for their restoration.



figure 3.0: milwaukee railroad freight house, 1998



figure 4.0: the student

## a restoration a rebuilding

Education is perhaps the most powerful tool for breaking the cycle of decline which has trapped these homeless children. Through education the transient child may find security, stability and structure allowing the child to seize the opportunities and possibilities that stand before him or her.

the curriculum

## educational model

The *PIVOT School*, a joint venture between Marquette University and the Milwaukee Public Schools served as a very useful model to inform the curriculum of the Restoration School project. Although the PIVOT School project was not intended for homeless children, it's emphasis on **social skills**, **community**, and **academic preparation**, addresses many of the challenges faced daily by the homeless child. These three ideals have been made the three educational pillars for the Restoration School's curriculum.

## transiency

Any discussion of teaching homeless children must address the difficult and pervasive challenge of transiency. The traditional structure of the American school system, which utilizes an eight year elementary and a four year high school system, is often too rigid to accommodate the transient homeless child. Homeless children often suffer from large gaps in their education due to the fact that their families are often on the move. Housing and employment searches, limits on lengths of stays at shelters, family disputes, abuse and many other factors all contribute to the epidemic of transiency among homeless children. According to the Institute for Children and Poverty, homeless children are nine times more likely to repeat a grade, four times more likely to drop out of school and three times more likely to be placed in special education programs than their housed peers.

The Restoration School is designed to be a **way station**, a stopping point on the journey away from homelessness. The success of this type of school is dependent upon strong relationships with the public school system, local educational agencies and other urban partners in order to serve the full spectrum of the homeless child's needs and provide a comprehensive system for all urban youth. The School's staff, curriculum, and environment will be specialized to foster a skill set intended to re-position the child towards success in the more mainstream public school system.

## three phases

Like the PIVOT School, The Restoration School is organized around three pillars-social skills, community, and academic preparation-each corresponding to phases in the child's education at the School.

The first phase embodies both the acquisition of social skills and the formation of community. During this phase, the student is given a sense of security through support from their classmates and teachers, learning both cooperation and socialization while gaining a powerful connection to the School and those around them.

Although socialization will be an important part of the students formal education in later phases, the introduction to the School, for a new student, begins much more informally. The first phase in the curriculum focuses on acclimating the child to their new surroundings and forging relationships. This is an important transitional phase between the unstructured homeless life, and the rigor and discipline that will be demanded of them in the classroom.

Students in the first-phase of the curriculum spend their day in a structured combination of dining, studying, playing, and working. All of these tasks are meant to connect the student to the School and to each other.

## dining area

“Dining is a time at which many behavioral patterns can be informally reinforced.”

-PIVOT curriculum

Breakfast, lunch, and an afternoon snack are eaten in common. Students and at least one faculty member sit at the same table and share the meal.

“Students demonstrate their commitment to the school by performing a daily chore for about twenty-five minutes each day.”

-PIVOT curriculum

Teams of students rotate through a learning kitchen to help prepare, serve and clear the shared meals. Along with these meal “chores”, student teams will also perform on other chore rotations around the school, from cleaning to gardening.

## learning kitchen

## workshop

Although this work is a small part of the student’s day, it becomes an important teaching element in the first phase of the curriculum.

## tool shed

## rec space

Recreation and study balance out the day for the first-phase student at The Restoration School. As with dining and work, students partaking in play and study are trained in respectful socialization and cooperation.

## informal study space

For students who have passed through the Restoration School before, the first phase may only last a day or two; for new students, this phase may last much longer. However, regardless of the time frame, once the student is acclimated, they can move onto the second phase which centers around academic preparedness.

The second phase of the curriculum shifts to an increased emphasis upon academic achievement, giving the student the foundational skills and knowledge upon which to build their future development. This phase revolves around training the student in the fundamentals of classroom behavior and expectations.

The existing skill set of homeless children in many ways runs counter to success within the classroom. Transiency, instability and the lack of structure in their lives often leave the homeless child possessive, restless and reclusive. The second phase of the Restoration curriculum aims to train the homeless student in a skill set that will insure classroom success. The classrooms at the Restoration School are the laboratories in which training occurs. Students will develop skills of respectful positive behavior, task completion, and knowledge acquisition.

## formal classrooms labs



While this second phase centers on academic training, the socialization and connectivity that was begun in the first phase continues. Shared meals, recreation and study time continue to reinforce positive behavioral patterns. As students progress through the curriculum towards the final phase three, the study and recreation time, while supervised, will become more and more self-directed.

In the third and final phase of the Restoration School curriculum, the student is expected to perform at a level that would make them able to transition out of the Restoration School and into placement in the public school system. This expected level of performance is reached by empowering the student with responsibilities that give them self confidence and self discipline.

In addition to continuing to gain academic knowledge in mathematics, reading and verbal skills, the student is also trained in applying their academic knowledge to decision-making and leadership situations. One example of this practical application of their advancement is that children in the third phase will serve as “buddies” for new students arriving at the School. Their primary job will be to orient the new student to the School, providing a friendly, peer-based introduction to the school. The experienced student gains from the independent (though supervised) completion of the assigned task. The new student gains a “buddy” that can understand and empathize with his/her situation. Both students gain experience in connecting with others and relationship building.

The challenging reality of homeless children is that they are forced to grow up fast. These children must have the tools and training to make good decisions regarding their education and life at a much earlier age than other children who may have a more traditional support network.



For a school that will specialize in socialization and community as integral components in its pedagogy, the urban context, with its complex order, provides insight for rebuilding both the child and the old railroad structure. The City lends itself metaphorically to the school by informing the design and in return, the School will reintroduce these “street kids” to a redefined City...a City that is no longer as hostile and hard...one that is filled more with possibility than insecurity.

### an urban restoration

Given the myriad of challenges facing the homeless child, the primary focus of the curriculum of this school project is to restore the spirit of the child and start a rebuilding process that breaks the cycle of decline brought on by homelessness.

Although homelessness affects children in every area of the United States, the Restoration School focuses on educating the inner-city homeless children of Minneapolis. The downtown urban context plays an important role in the lives of these students. As homeless children in the Minneapolis area, they most likely have grown up on the streets and in the shelters of this city. They have wandered, feeling the stress, danger and hardness of the city. They have also been forced to learn a skill-set to survive in this city. The Restoration School, by its location in this urban context, comes with a certain familiarity to these city kids. However, to their urban experience, the school adds the unfamiliar: community, socialization and security, which are key elements of a new skill set.

As will be discussed in the following pages, the architectural “program” of this building project, in other words, the specific operational objectives of the project, support this curriculum of restoration. The loss of community and routine which often occurs when homeless, are reintroduced to the child. The child is supported and educated both within a school community and in a larger urban environment...both of which are reintroduced as familiar and new to the child.



figure 5.0: the urban context



figure 5.1: the urban context

the building

12

third avenue second street minneapolis, minnesota

the  
restoration

school

With the end user and curriculum of the Restoration School project introduced, a glimpse of the history of the Freight House will highlight the building's inception, prime and decline as it was, and remains, rooted in the City.



figure 6.0: *bird's eye view of minneapolis, minnesota, 1895*

## a young city growing fast

The city of Minneapolis grew up around the milling industry, which formed on the banks of the Mississippi River. By the end of the 19th century, the city was known as “The Flour Milling Capitol of the World”. According to the Minnesota Historical Society, the city's population in 1870 was 13,000, and in the span of twenty years, had grown to 165,000.

As the milling industry grew, so too did the railroads. They were symbiotic partners in the heart of the city. This partnership is illustrated in the lithograph, shown above, entitled *Bird's eye view of Minneapolis, Minnesota, 1895*. It is interesting to note that although the Depot building would change over time, the Freight house has remained in it's original location from it's inception.

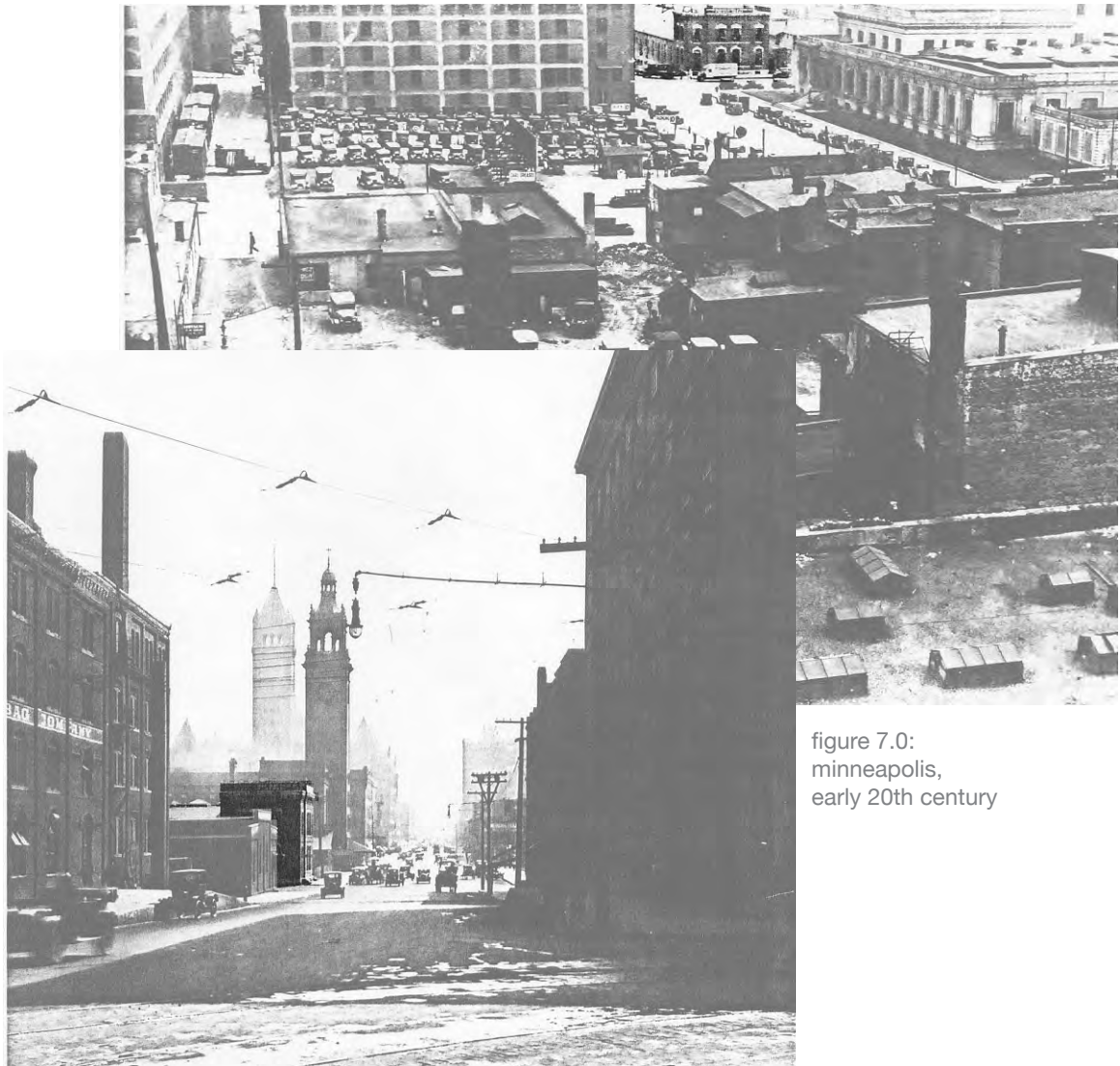


figure 7.0:  
minneapolis,  
early 20th century

## at the center of things

During the latter part of the 19th century, the national railroads expanded to Minneapolis in service of the milling industry, and helped to create a vibrant, commercial hub in the Midwest. At the center of this vital transportation industry was the “Head-Station”. This station was comprised of the three story Renaissance Revival Depot building located, since 1899, at the corner of Third Avenue and Washington Avenue, and the adjacent Freight House, which pre-dates this Depot building, located on the corner of Third Avenue and Second Street. Both served as the end of the line for the Chicago, Milwaukee, St. Paul & Pacific Railroad Company.



figure 8.0: freight house, 1997

In 1971, the last train left the head station and both the Depot and the Freight House were abandoned. By this time the Minneapolis milling industry had been largely displaced, leaving most of the mills vacant.

For the next three decades, as the once thriving Milling District was slowly replaced with surface parking lots, the Freight house became isolated and only a fraction of what it once was.

During these three decades, the Freight house would experience it's own  
**cycle of decline.**



figure 9.0: freight house, 1986



figure 10.0: current conditions, 1998

In 1998, after being abandoned and vacant for many years, the Freight House was showing the scars, stress and cracks brought on by the relentless environment and the lack of care.



figure 11.0: drawings of current conditions, 1998

building + child

17

the  
restoration

third avenue second street minneapolis, minnesota

school





figure 12.0: freight house, 1986

In the previous overview of the plight of the homeless child and the Freight House, the common bond was established. The homeless child and the vacant building have both spiraled down in a cycle of decline...both are left tired and isolated.

The Restoration School project brings the homeless child and this building together to rebuild, recover, and restore.

### early design



Resiliency

Restoration



figure 13.0: faces; isolation

figure 14.0: freight house south elevation, 1998

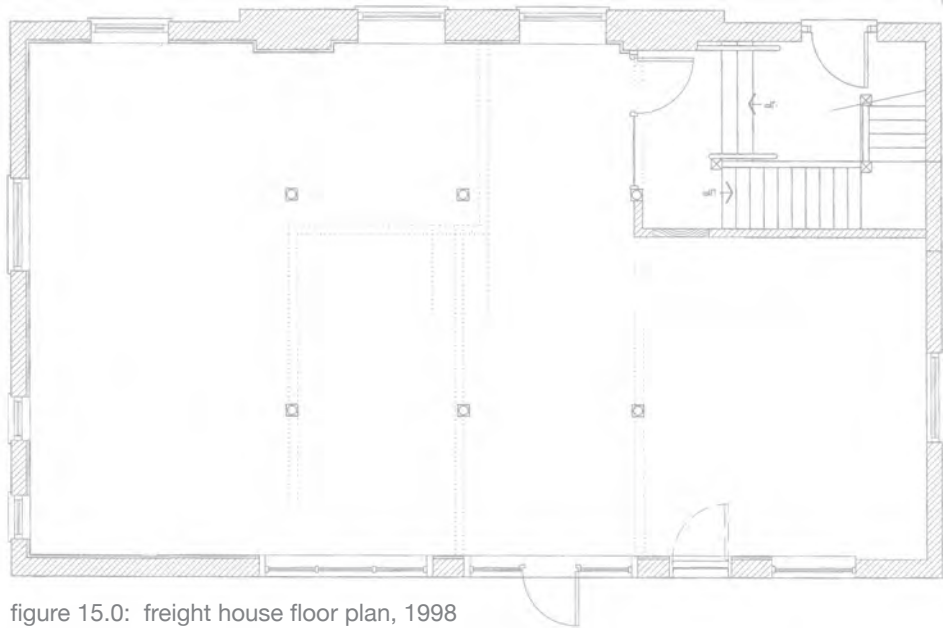
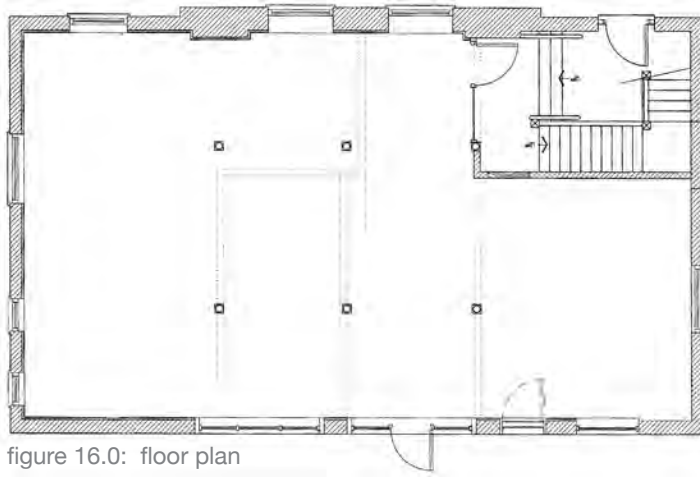


figure 15.0: freight house floor plan, 1998

## the shed



Unlike the effects of homelessness, which can not always be noticed by the casual observer, the Freight House is marked with a scar that clearly suggests it's lost identity and the effects of it's decline.

On the south elevation, the external markings of the once prominent shed are visible to all.

At the height of the buildings decline, the shed fell into such disrepair that it was demolished. With it an integral part of the Freight House was lost.



figure 17.0: south elevation

The value of the shed to the building's restoration was threefold. Firstly, the strong formal quality of the shed speaks to the historic typology of the building, maintaining echoes of the industrial character of the Freight House. Secondly, the shed re-establishes the buildings primacy on the site, giving back to the building it's stature. And lastly, the shed restores the integrity and character of 2nd Street.



figure 18.0: sheds

## the city and the street

Throughout this project the urban context played an influential role on many levels. As has been discussed, these children and this building are defined by the city...from good days in the past to isolation and abandonment...to hidden potential.

During the early phases of design, the city also influenced the schematic development of the restoration effort.

The city grid and the shed are intertwined. Historically, the shed provided a strong border between the street and the site-between public and private. With the restoration of the shed, the identity of the street and building are both strengthened. The School and the city will benefit from a defined border between public and private and both areas will serve as valuable arenas for re-tooling the children's social skills.

figure 19.0: downtown (model)



figure 20.0: massing study

## a right-sized school



figure 21.0: adjacencies

A series of studies were undertaken to establish the appropriate size of the addition to the existing Freight House.

Much of this study revolved around the premise that by forging urban partnerships, the School would be able to leverage the resources of the Downtown community.

In this way, the facilities and resources of potential partners such as the existing public and private downtown schools, corporations, and the public library and public health facilities—all within blocks of the Restoration School—could enhance the Schools curriculum and keep the restoration project right-sized for the site.



figure 22.0: massing study (models)

an initial program  
curriculum + building



- Administration
- Art Lab
- Classrooms
- Commons
- Dining
- Kitchen
- Resource Center
  - Computer Lab
  - Reference Lab
- Recreation Space
- Science Lab
- Student Care Center
- Workshop
- General Storage
- Toilet Facilities

These programmatic requirements stem from the curriculum and begin to form the basis of design.

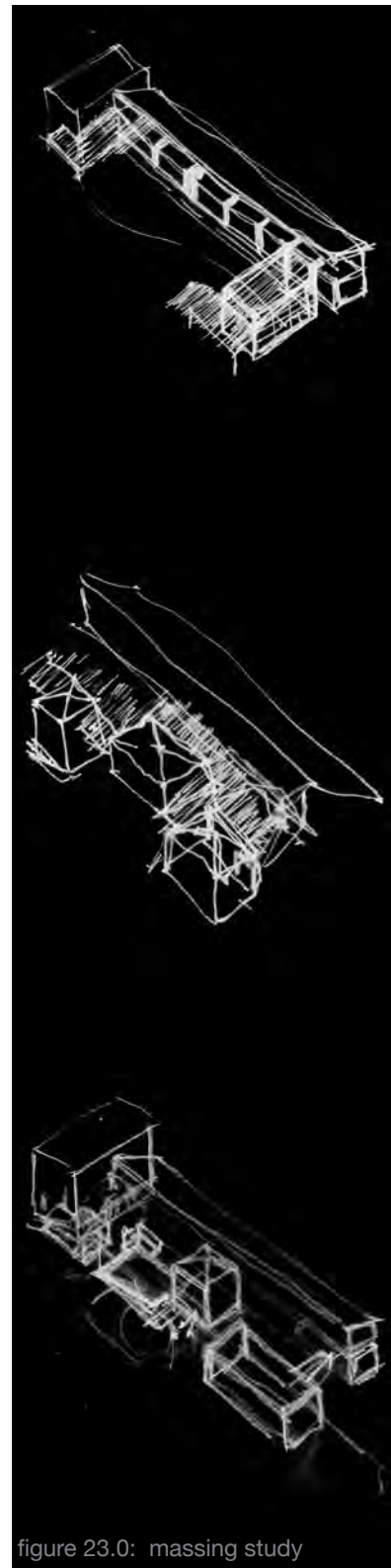


figure 23.0: massing study

developing the design

## city + building

The design development phase of the project explored ways to effectively build upon the formal groundwork laid in the early stages of design. Relationships among the homeless child, building, curriculum and urban context, that are central to this thesis, needed to be developed and expressed with spatial relationships to intertwine the building with the users of the school.

In proposing an expansion to the existing freight house building, it was realized that the primacy of the existing building and the importance of the “shed” form served to effectively re-establish not only the building’s integrity, but also the external (street-facing) boundary of the site.

The existing north and new east portions of the project made a formal reference to the historic “Mill City” district, directly to the east of the site. This renovated presence on 3rd avenue and 2nd street would remind the City of the buildings long-standing claim to the corner.

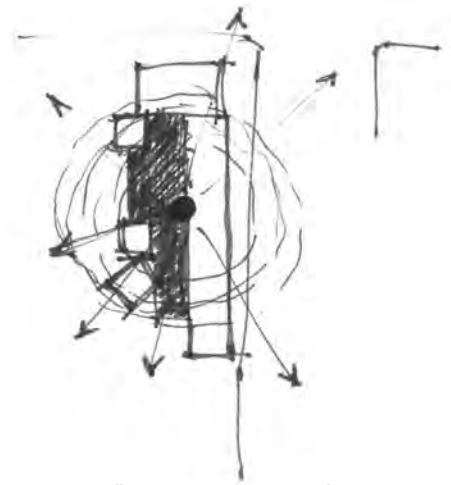


figure 24.0: outreach

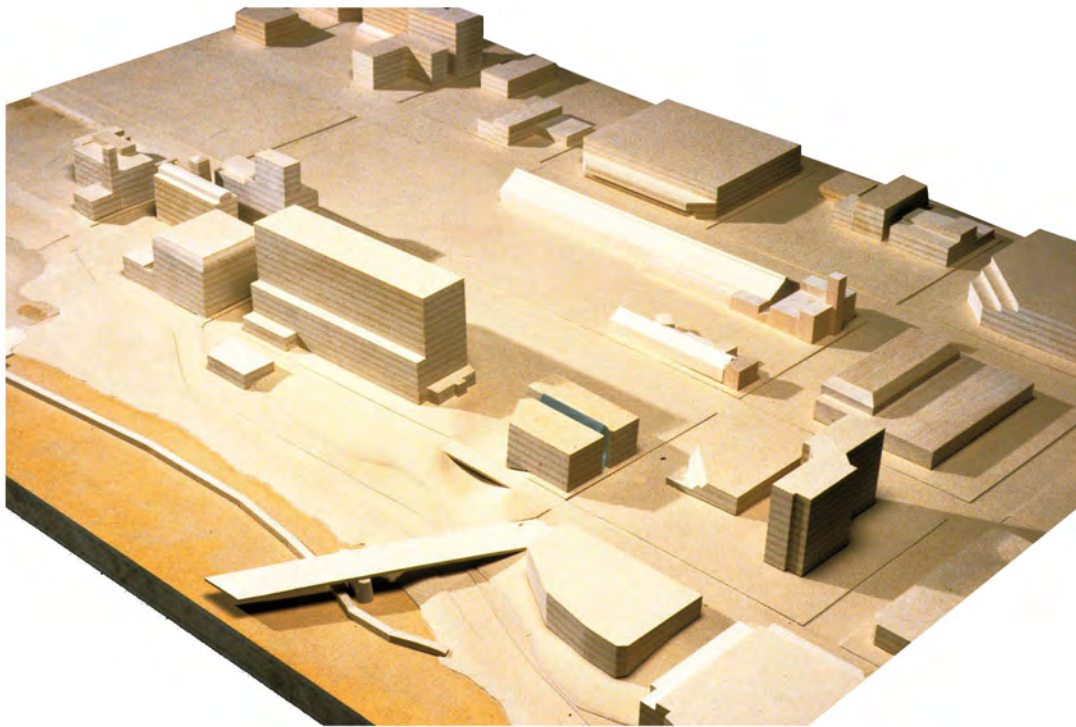


figure 25.0: downtown district

Simultaneously, the south and west portions of the new plan started to take cues from the modern urban context, the central business district, directly to the west of the site.

## city + child

As has been discussed, the homeless child's experience within the City is often one of insecurity, anxiety and isolation. For a child who has spent the past months moving from shelter to shelter, or perhaps living in an even more chaotic and stressful situation, the transition to a public school classroom can often be overwhelming.

During this phase of the design, the dynamics of the city of Minneapolis were looked at for a way to soften the traumatic change from the transient lifestyle to a structured life of a full-time student. By taking cues from the City, the Restoration School environment could be familiar to an urban homeless child on their first day.

### Cue 1: An Assemblage of Parts

An urban environment is made of distinctive parts that bring energy, interest, diversity and ultimately compose a cohesive whole.

### Cue 2: Informal Spaces Offer Socialization...and Privacy.

An urban environment offers opportunities for different levels of socialization - an intimate conversation with a friend, a wave to a familiar passerby, or a place to be alone as the city passes by.

### Cue 3: Streets & Sidewalks Connect the Formal & Informal Spaces.

For residents of urban environments, the street and sidewalk take on a life of their own as they move within their neighborhoods.

The possibility of internalizing these urban characteristics within the school and using them as a force for child restoration proved to be an important way to link the social and communal aspects of the curriculum with the child, city and building renovation.

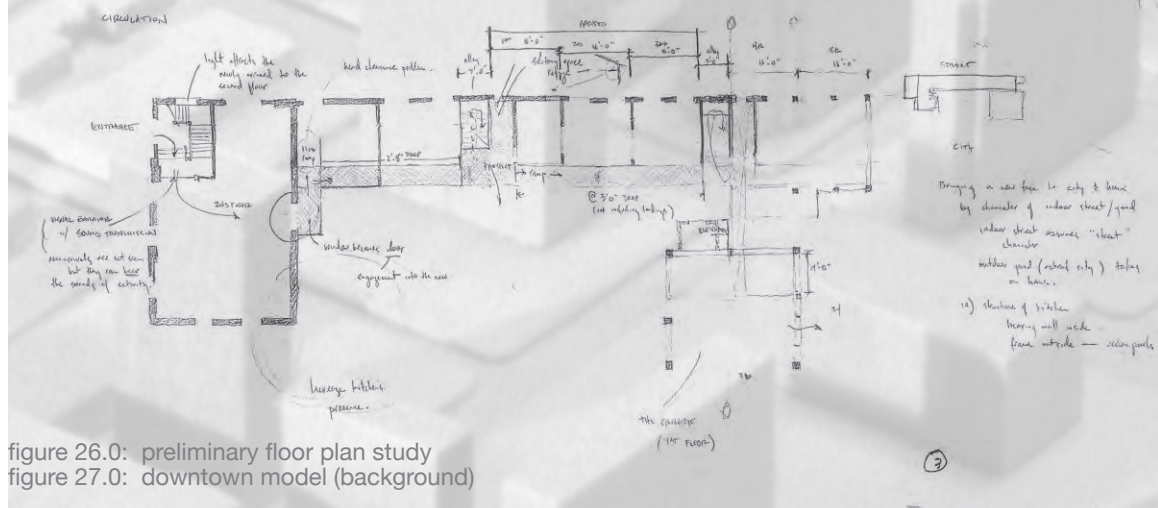


figure 26.0: preliminary floor plan study  
figure 27.0: downtown model (background)



Building elements were tested...

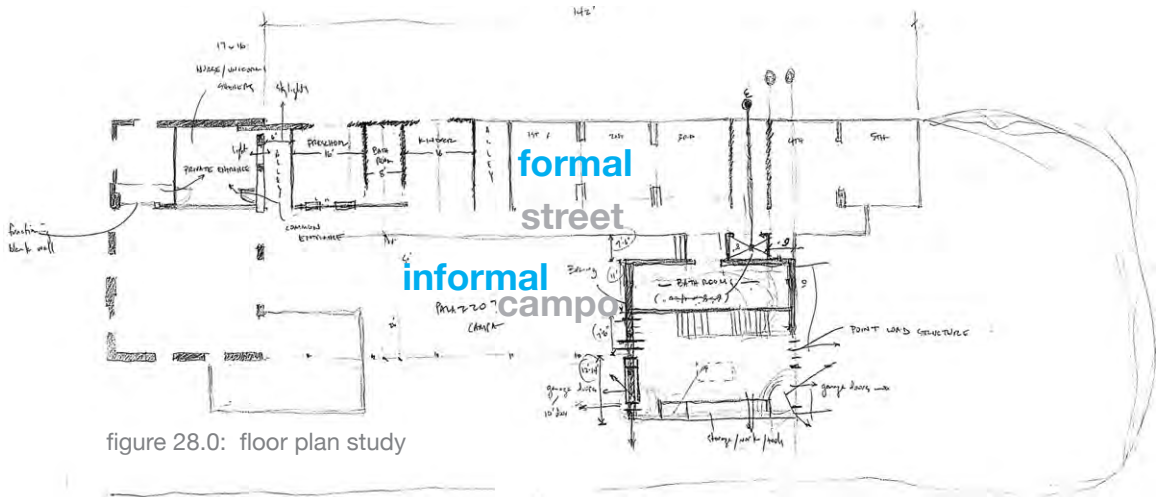


figure 28.0: floor plan study

### entry & transition



figure 29.0: entry study model

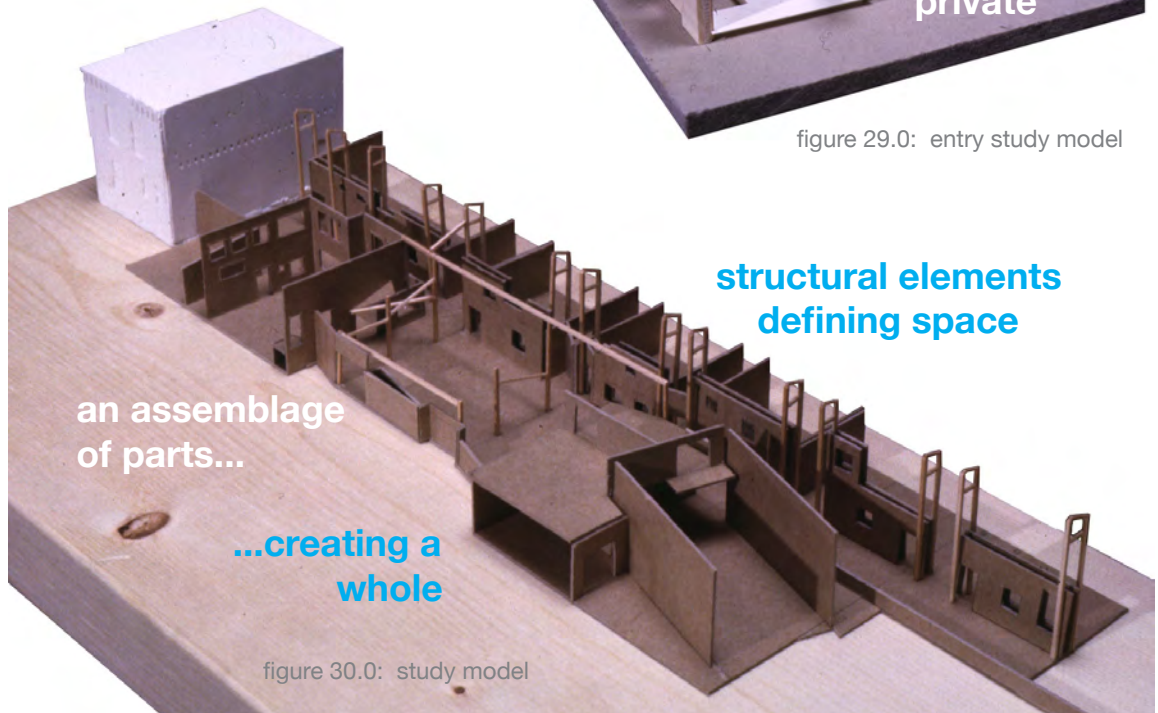


figure 30.0: study model

Spatial relationships were refined...

The massing of the shed enabled a variety of spaces to develop. Main level classrooms & upper level “break-out” spaces served the curriculum’s requirement for both formal learning and independent study space.

Due to the “way-station” nature of the School, the entry sequence was vital to the building’s operational layout.

Sequencing scenarios were used to develop circulation patterns that sensitively bring the student into the building. While the building allows for multiple scenarios, one example is shown below.



figure 31.0: longitudinal building section

- |                                 |                         |
|---------------------------------|-------------------------|
| in off the city street          | 1. Entry                |
| welcome                         | 2. Administration       |
| care                            | 3. Student Care Center  |
| prospects                       | 4. Overlook             |
| get to the action               | 5. Vertical Circulation |
| onto a different kind of street | 6. Main Street          |



figure 32.0: precedent images spatial studies

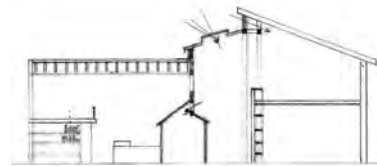
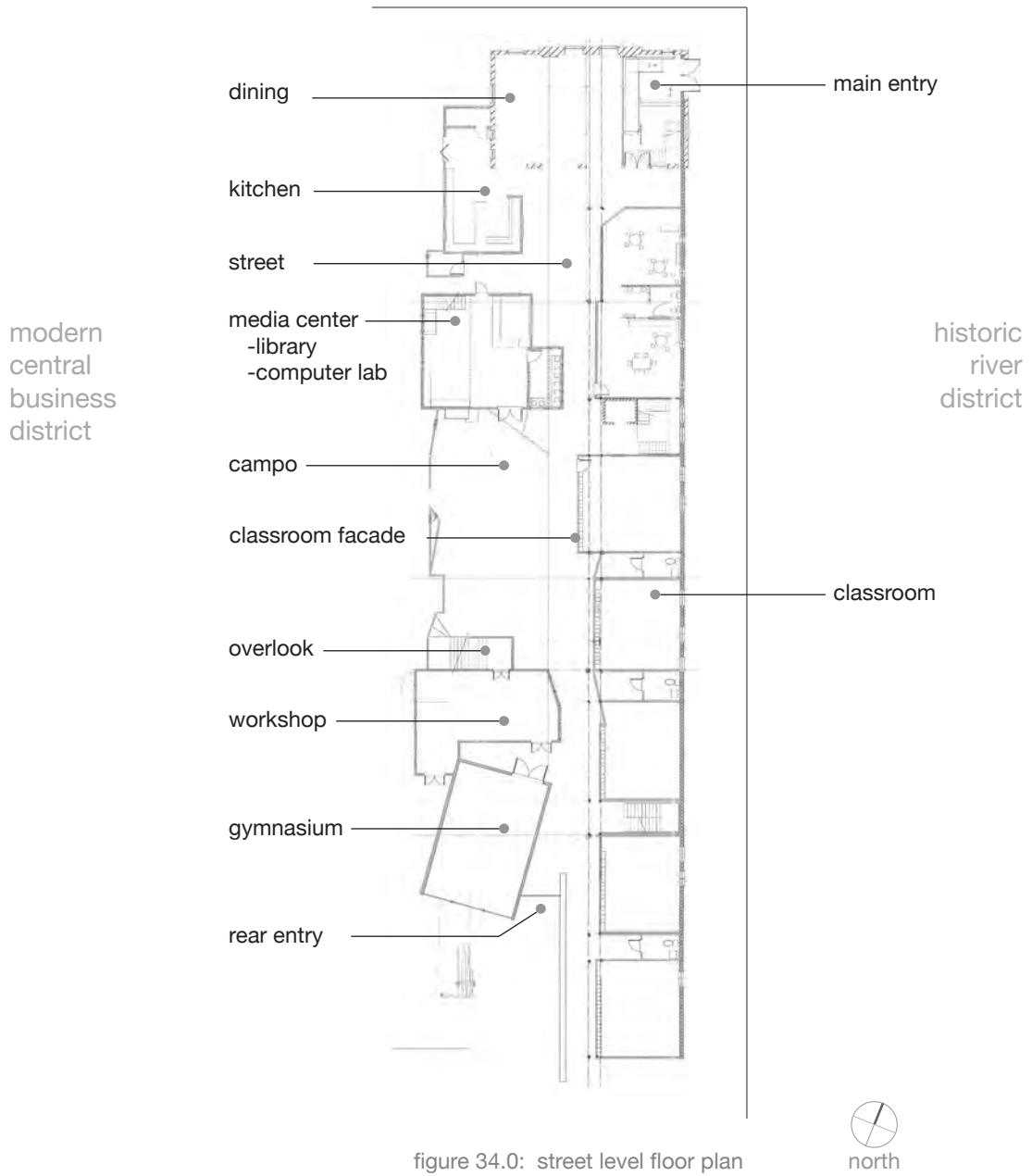


figure 33.0: building section studies



social skills  
academics  
community

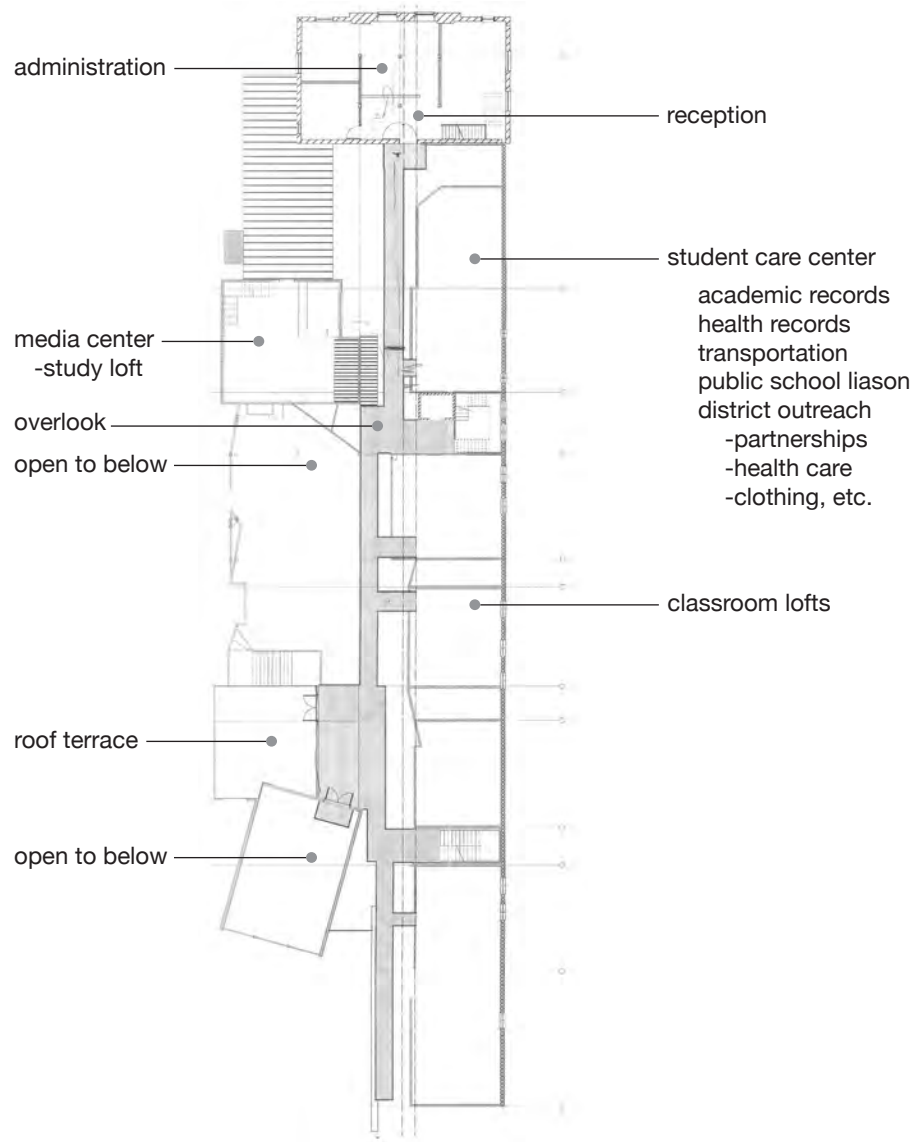


figure 35.0: second level floor plan



social skills  
 academics  
 community

a final restoration

30

third avenue second street minneapolis, minnesota

the  
restoration

school

## breaking the cycle of decline



figure 36.0: east entry elevation



figure 37.0: south entry elevation

The final restoration section illustrates the layout of the School as it was refined from the design development phase. This section also defines further the social and communal components of the curriculum.

The following pages illustrate how the building and curriculum were ultimately brought together to serve these most unique children.

## project area summary

### first floor net areas:

existing building		1340 sf
learning kitchen		575 sf
classrooms:		
classroom 1	795 sf	
classroom 2	660 sf	
classroom 3	480 sf	
classroom 4	465 sf	
classroom 5	435 sf	
classroom 6	490 sf	
		3325 sf
gymnasium	780 sf	
workshop	675 sf	
campo	1880 sf	
media center	880 sf	
toilet rooms 1-3	480 sf	

### second floor net areas:

existing building		1240 sf
student care center		1030 sf
wellness center		675 sf
classroom lofts:		
classroom loft 1	970 sf	
classroom loft 2	935 sf	
		1905 sf
overlook circulation		2294 sf
roof deck		690 sf
toilet rooms 4		65 sf

existing gross area:	3,000 sf
new gross area (addition):	20,700 sf
<b>total building gross area:</b>	<b>23,700 sf</b>

## social skills

A large portion of the first floor in the existing building is dedicated to dining. To this was added an adjacent learning kitchen. Together, these two spaces form the heart of the school's social instruction.

One goal of the project, and an important component of the thesis, was to leverage the history and story of the Freight House into an identifying and instructive element in the education of the homeless children who will occupy this school. By locating the dining room in this portion of the project, the students are exposed to the rich, historic interior on a daily basis. This portion of the existing building becomes a backdrop for conversation, laughter, friendship, and informal instruction (all disguised as a meal).

As discussed earlier, another important way of training the children in a new social skill set (and instilling a sense of belonging and stewardship) is to have the students perform "chores" at the school. These activities are done in teams that foster cooperation and social interaction. To facilitate these activities a workshop is located adjacent to the gymnasium. This utilitarian space has access to both the interior of the school and exterior yard, as the children will be responsible for such tasks as cleaning and gardening.

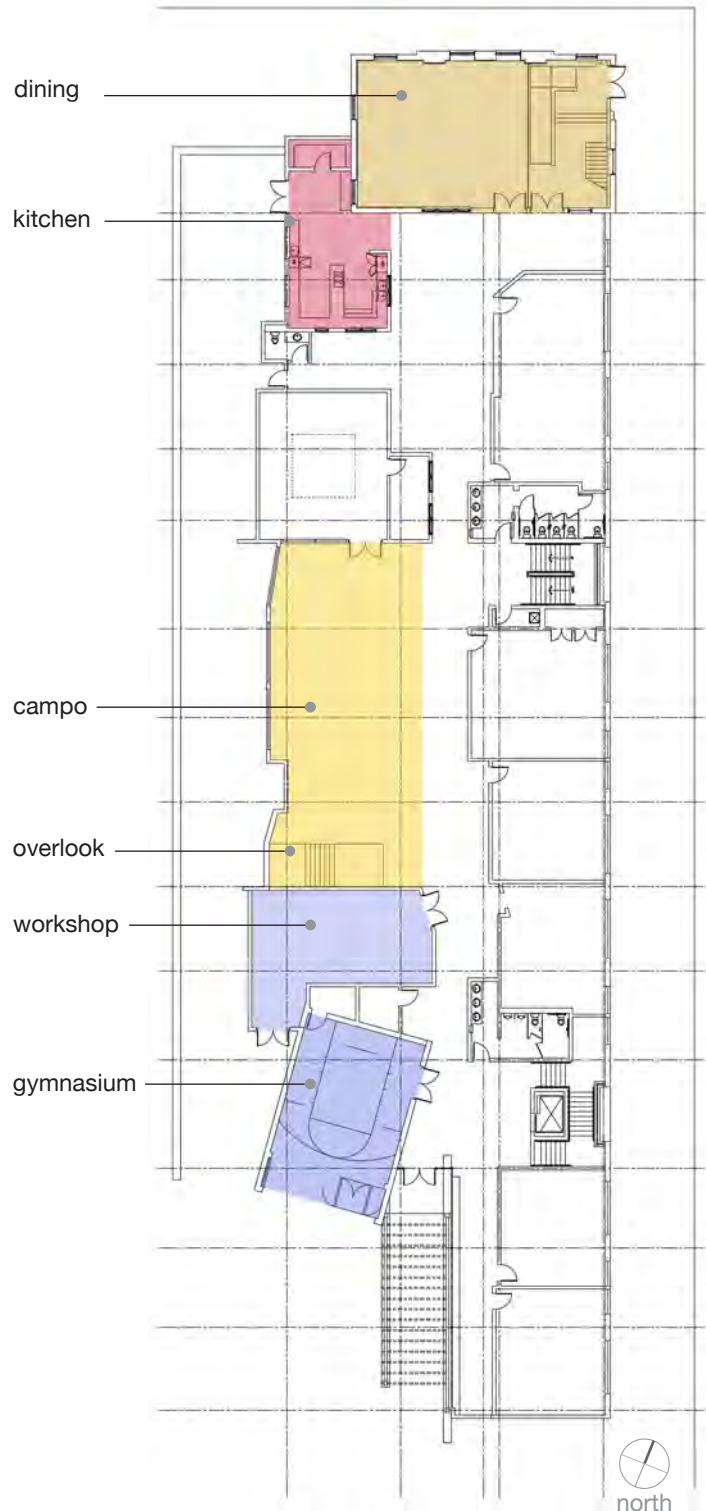


figure 38.0: street level floor plan (social areas)





The workshop also serves formally as a “bookend” to define the central *Campo* space which will be discussed further below.

Paired with the workshop is the gymnasium. This small indoor space provides room for recreation and physical fitness opportunities to support student wellness. As was mentioned in the earlier discussion of the “right-sized” school, due to the compact urban site, the school will often rely on partnerships with other downtown facilities to expand it’s curriculum...and the gymnasium is a perfect example of this type of leveraging.

Within blocks of the Restoration School project, is De La Salle High School which has full indoor and outdoor athletic facilities, as well as private health clubs which also have gymnasium facilities. By forging partnerships with these neighboring facilities, instead of building larger facilities of their own, the Restoration School project is able to reduce the required square footage, and thereby fit onto this small urban site.

The space itself is oriented towards the south, and made of hard, durable surfaces on three sides, with the south elevation opening up, with operable glazing, to both extend the space to the outdoors and to capture natural light.

Between the workshop and gymnasium spaces, which provide the students with creation and recreation, and the dining and kitchen areas, which provide and reinforce camaraderie, lies the “campo”. This flexible space is inspired by urban squares found in many vibrant cities around the world and which serve the neighborhood by providing a space for local residents to gather.

Vendors selling their goods, visiting neighbors watching their children play, small theatrical performances, commuting pedestrians, residents reading the daily news on a bench, are all activities common to a campo.

This space provides the School a flexible urban space in the middle of the building.



figure 39.0: south gymnasium elevation



figure 40.0: italian campo



figure 41.0: interior campo

The campo provides the students with a place to interact, congregate, and entertain. With the library, classrooms, workshop and overlook all surrounding it, the campo is a reinterpretation of an urban space for urban children. A space with the flexibility and familiar dynamic of a city square, yet with the security and comfort of a safe, welcoming environment.

## academics

As discussed earlier, the second phase of the curriculum at the Restoration School project centers around academic preparedness. On the main level of the school, there are six classrooms and the media center which serve the academic training of the students. These classrooms line the eastern wall of the shed portion of the building, while the media center is a component of the assemblage that forms the western portion of the building addition.

To maximize flexibility in accommodating different learning styles and student populations, the classrooms were designed as varying sized rectangular units. These assorted units present undulating facades, much like city storefronts, or freight boxes lined up in a shed.

The Media Center provides the school with a library and computer lab. Given the diverse and abundant public and private media sources within blocks of the School,

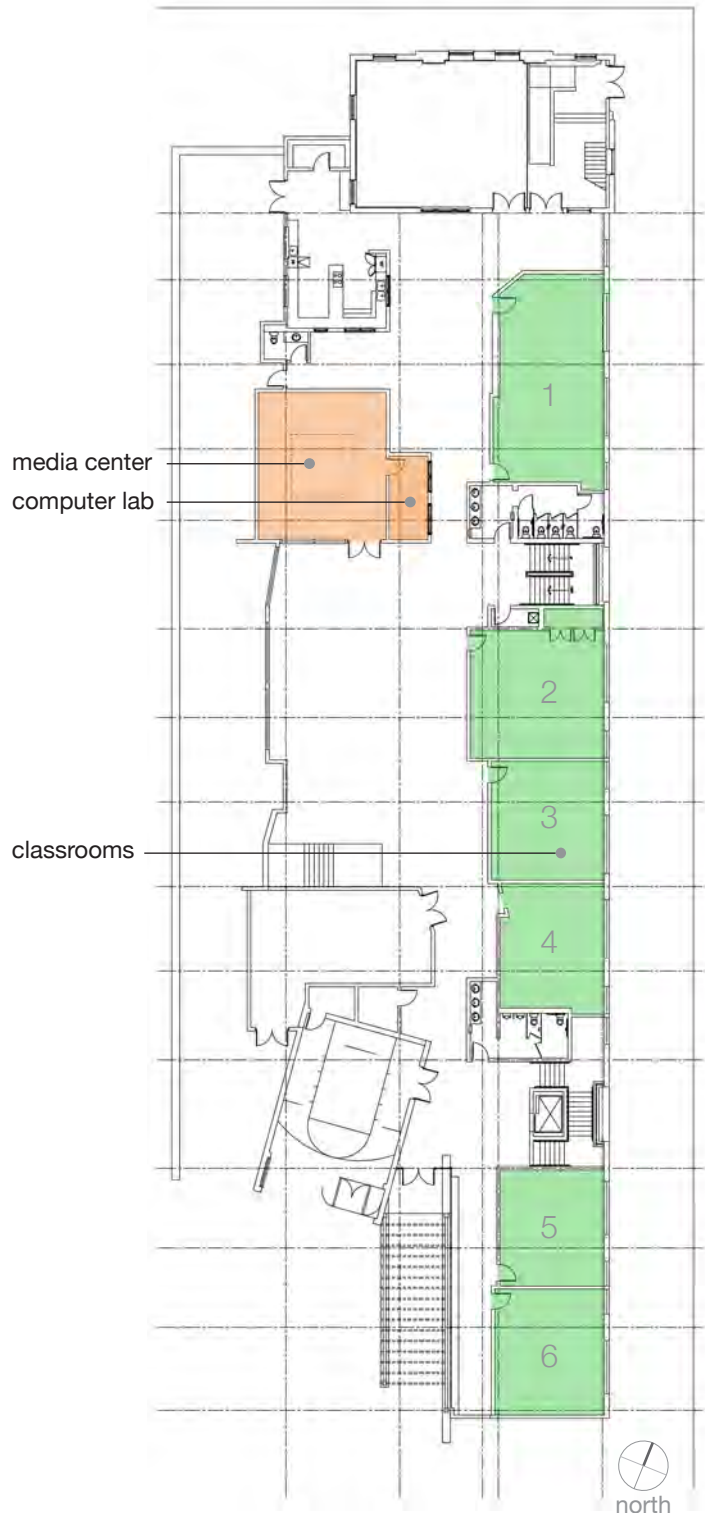


figure 42.0: street level floor plan (academic areas)



like the Gymnasium, an attempt was made to properly size the Media Center to meet the needs of the curriculum while leveraging the neighboring facilities to reduce the building's square footage.

## central street

The classrooms are located between two streets. Through exterior windows, the students can look to the east and see the downtown Minneapolis activity on 2nd Street. Through interior windows, the students can look west out their classroom and see "Central Street" which is the main connector within the school.

Like 2nd Street, Central Street serves the utilitarian function of providing circulation and connection. In addition, Central Street also serves to organize the School in a way that is very familiar to these homeless students. Unlike students from less urban environments, these students have been raised on the streets of downtown Minneapolis. They know the language of streets. They can easily assimilate the relationship between storefronts and streets or, in this case, classrooms and Central street. As previously discussed, not only is the historic Freight House building linked to, and defined by, the city street, the analogy of the urban street, when used in the design of the School, provides a means to orient, teach and restore these street-smart kids.

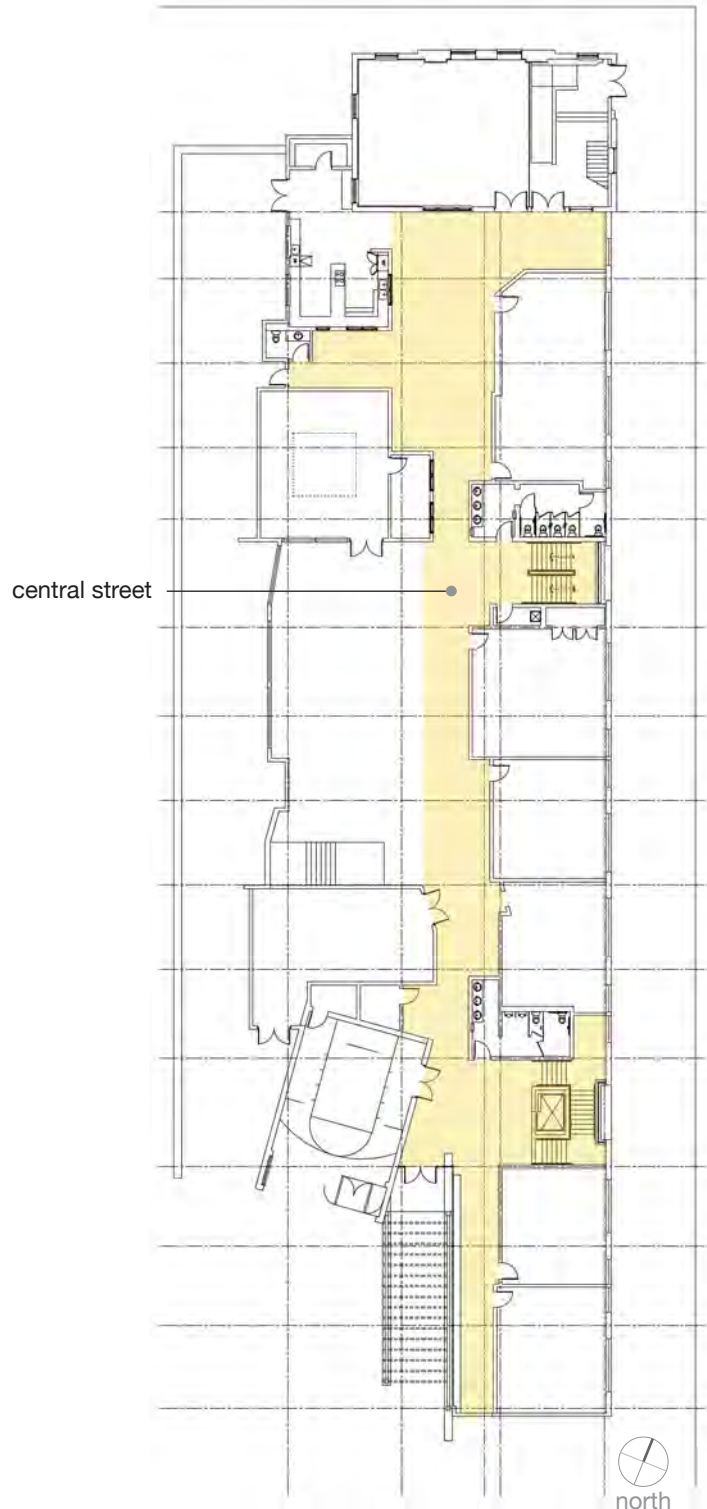


figure 43.0: street level floor plan (the street)

## community

As the components of the Restoration School come together to form a community within the urban fabric of downtown Minneapolis, a powerful tool is created to break the cycle of decline that has gripped both the historic Freight House, and the homeless students of this School.

Not only does this School building project address and serve the three phases of the curriculum, it also creates an important downtown haven for this vulnerable urban population of children.

The original, dilapidated building, once vacant and isolated, is restored to serve as a source of protection and hope.

social skills

academics

community

figure 45.0: final building model



figure 44.0: street level floor plan (community)

## the second level

As discussed previously, by taking cues from the historic Freight House structure, and as a means to provide additional support for the Restoration School's curriculum, a second level was designed over a portion of the addition.

In keeping with the industrial nature of the original building, the circulation path for this upper level was given characteristics of a cat-walk. This walkway, or "overlook", extends the length of the addition from the original upper level of the Freight House. In so doing, it serves as the connector to the functional spaces on the second floor, as well as provides elevation and prospect within the School. An exciting place to view the activity below; to gain a viewpoint and observe the scene playing out on the interior street and in the campo...an urban perspective.

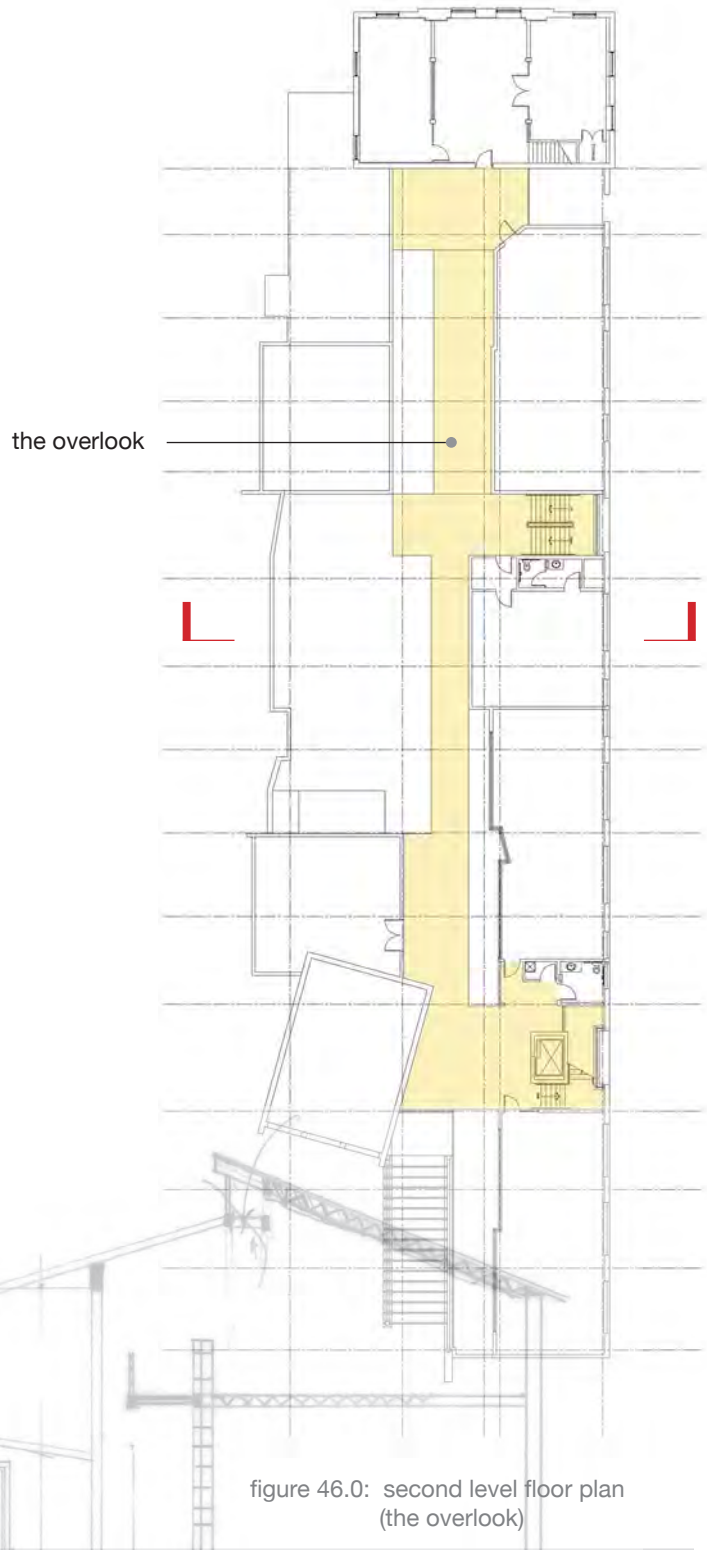


figure 46.0: second level floor plan  
(the overlook)

figure 47.0: building section

## expanded learning

As the first level classrooms focus on direct instruction, the upper level classroom lofts provide space for alternative teaching and learning methods.

The educationalist David Thornburg uses the metaphors of a *campfire*, *watering hole* and a *cave* to describe different ways students learn. Learning from experts (campfire), from peers (watering hole) and ourselves (cave), all contribute to a well-rounded educational approach.

Perhaps a teacher takes a small group of students up to the loft, reads them a story and sparks a discussion. Perhaps students are tasked with going up to the loft, collaborating on a challenging problem and sharing their discoveries with the larger group in the classroom. Or, perhaps a group of students have time in the loft to independently study with passive supervision and active peace and quiet.

The upper level lofts compliment the lower level classrooms by providing additional environments to support the diverse, expanded learning opportunities able to be employed at the Restoration School.

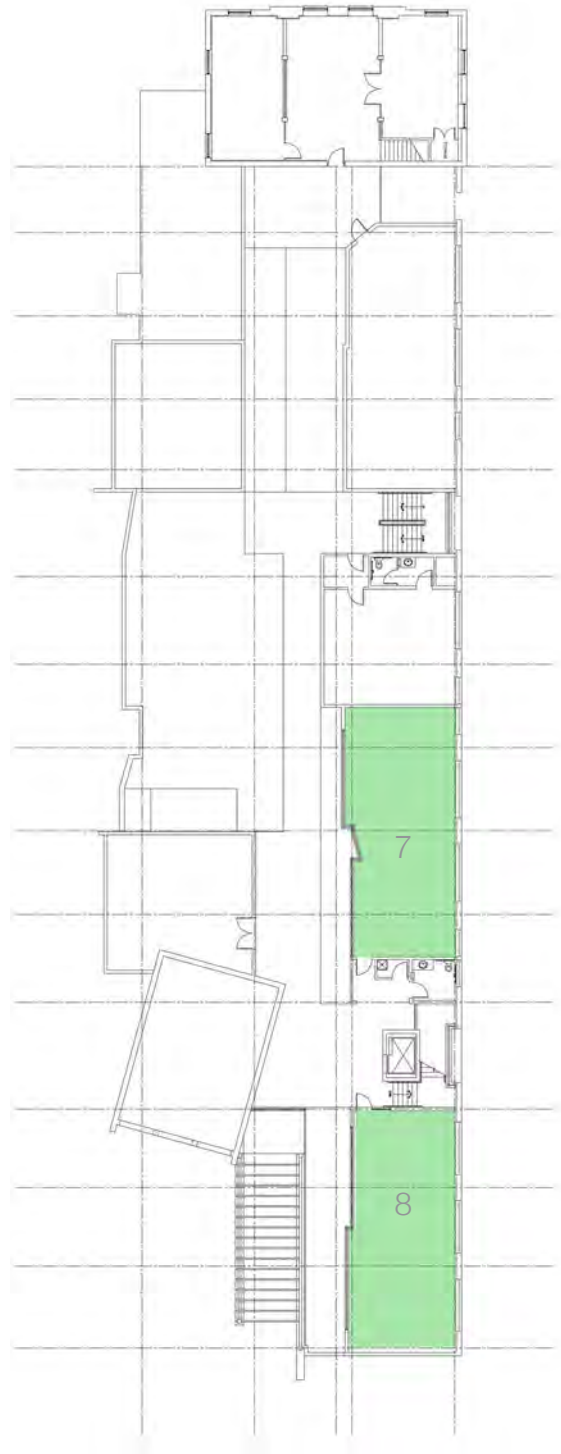


figure 48.0: second level floor plan (academic areas)

## community in + out reach

Given the health, developmental and transitory challenges these homeless students face, an important component of the Restoration School is community relations.

The Student Care Center is the primary connection between the School and the community. The members of the faculty within this open office area will work closely with the administration to track the academic and health records of the students; with the Public School System to accept and place new and graduating students, as well as coordinate community partnerships with public and private downtown neighbors.

While the Student Care Center is the link to the surrounding downtown community, the administration is responsible for the community within the School. Located on the second floor of the original building, the area serves two functions: firstly, to provide space for the faculty to work, collaborate and rest; and secondly, to provide a reception area to meet new arrivals to the school.

To maintain the health of the School community, a small wellness center is also located on the second floor. This space is primarily to serve the unique physical & mental needs of the homeless children while they are at the Restoration School. Like other resources at the School, the Wellness Center would partner with other downtown health and wellness resources to expand its capabilities as it serves the student body.

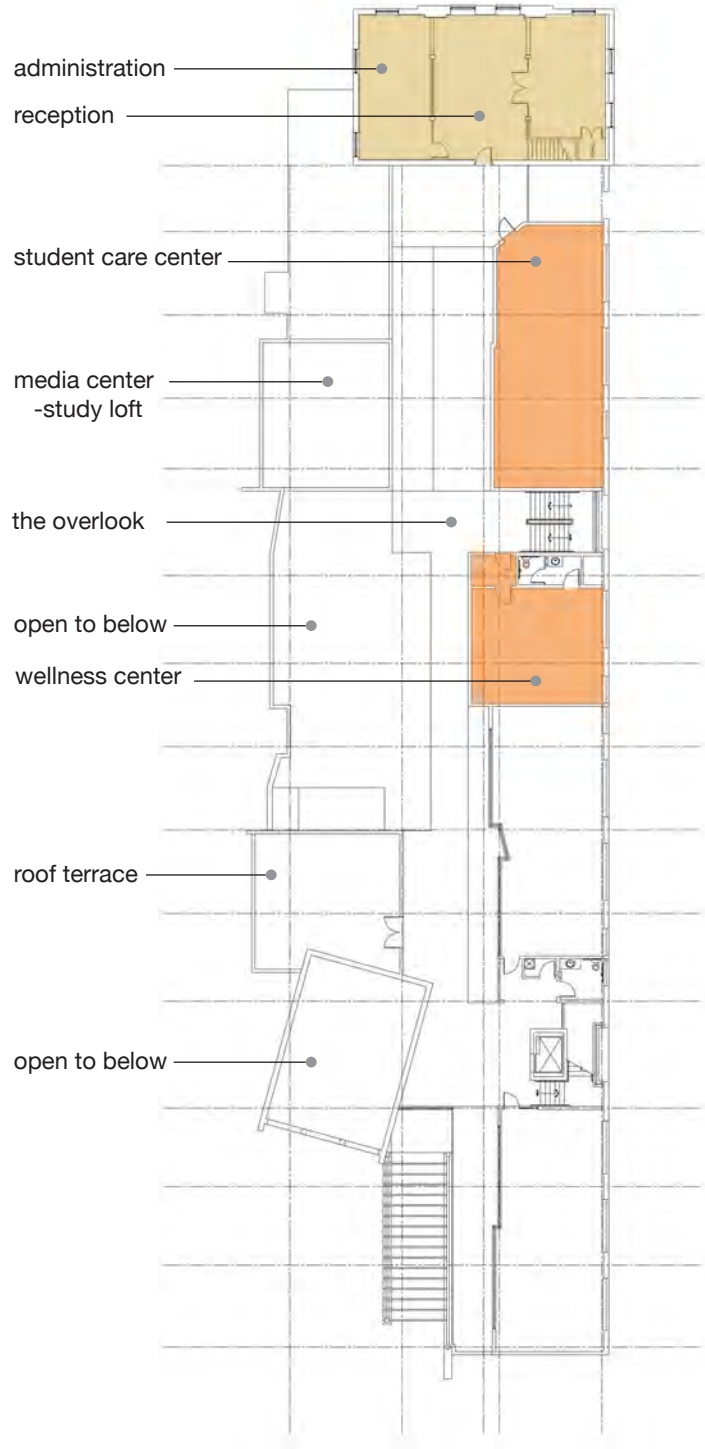


figure 49.0: second level floor plan  
(community relations)

## elevations



figure 50.0: north elevation, 3rd avenue

The north elevation spotlights the restored Freight House with its reinstated presence on the corner of 3rd avenue and 2nd street. A glimpse of the kitchen and learning center appear on the side to indicate to passers-by that the Freight House has redefined its role in the City.





figure 51.0: east elevation, 2nd street



figure 51.1: east elevation, detail

The shed is restored. The glazing is small and strategically placed on the east elevation to relate to the scale of the inhabitants and to recall the utilitarian facades of a historic industrial building.

The exterior cladding of the addition passes into the Freight House and manifests itself at the entry. As one enters the building, a new layer is revealed under the historic brick.

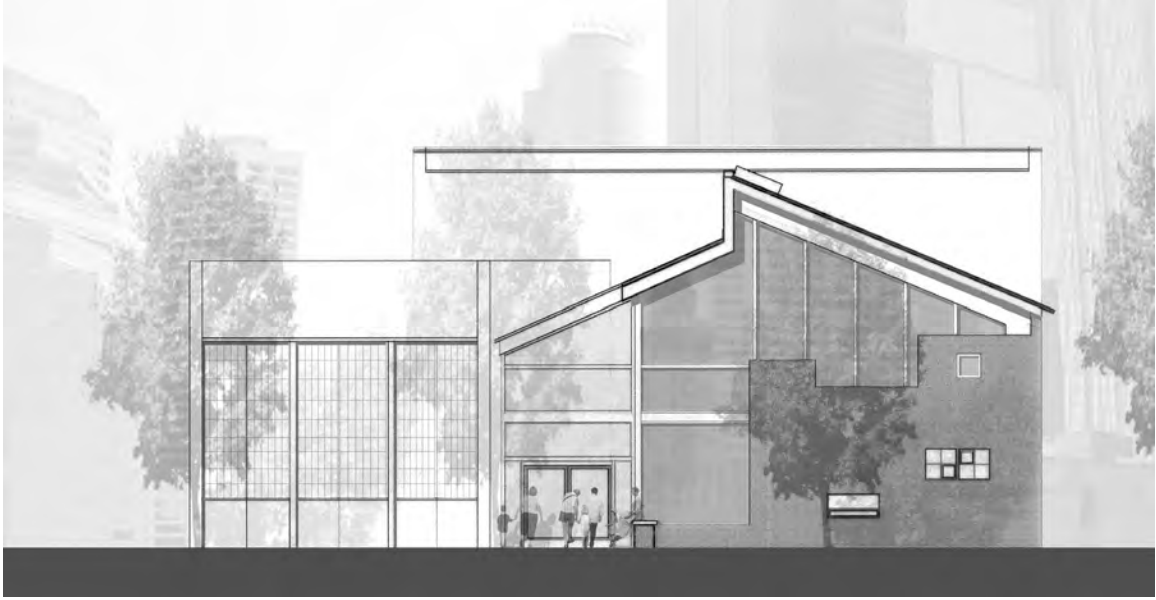


figure 52.0: south elevation

As one moves from the east side of the building to the south, the shed begins to transform itself. As discussed earlier, the qualities that were required on the east - a robust form that would not only call to mind an industrial shed but help to reinforce the street edge - can, on the south, become a light, open and welcoming structure.



figure 53.0: west elevation



figure 53.1: west elevation, detail 1

The west elevation expresses the historic and current activity within the building, while responding to the urban context.

The shed roof is the backbone which unites the new components of the school as they reach out to the central business district of the City.



figure 53.2: west elevation, detail 2

## conclusions

## a sum greater than the parts

This project began with a description of the common reality between the urban homeless child and the vacant building on the corner of third avenue and second street in Minneapolis. Connections between these two were discussed - physical qualities and physical surroundings were shown to be commonalities - and an assertion was made that, because of these shared characteristics, a single project could restore both.

## the child

As discussed earlier, urban homeless children face unique challenges that often prevent them from obtaining an education. The Restoration School project envisions these children together with a school that is designed to meet these challenges. By combining an innovative curriculum with a downtown building that has been redesigned and reset to leverage the dynamics and resources of the familiar City, the Restoration School project illustrates how these children can be given the tools to break their cycle of decline.

## the building

Instead of standing isolated on the corner of third avenue and second street with the scars of a demolished shed building on it's facade, this project's elevation images illustrate the Freight House in it's reclaimed position at the head of a new shed form. In this new position, the unique qualities of this old building lend credibility to the Restoration School project. It's aged and imperfect masonry, once retooled, can demonstrates strength and permanence. It's historic affiliation to the city of Minneapolis, once retold, can demonstrates adaptability and perseverance. It's long-standing connection with the downtown streets, once reintroduced as a school, can lend familiarity and comfort to children raised on the downtown streets.

This historic Freight House, once restored, has qualities that can resonate with a homeless kid from the city.

The vacant building in the sea of surface parking lots has catalytic potential. It's cycle of decline can be broken.

*For a child population that is homeless and in need of education, the restoration of an urban dilapidated building not only provides a stimulating and familiar backdrop for education, it signals a breaking of the cycle of decline that grips both the child and the building.*

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appendix  
jury comments



Spring 1998 Wednesday June 10  
Thesis Juries Graduate and Undergraduate  
Department of Architecture - CALA

Jury 3

Outside East & North

Moderator: Parker

Jurors: Satkowski, Franck, Fisher, Mack, Dimond, LaDouceur, LaVine, James, Piotrowski, Tollefson

2:00

Steve Rabatin

*Homeless School*

Piotrowski, Fisher, Weeks

---

- 6 A - NICELY WORKED OUT ELEVATIONS  
& PLAN, CONSISTENT APPROACH  
TO INTER- / PLAN / ELEVATION
- 6 B - SITE PLAN NOT WORKED OUT  
FUNCTIONAL PROBLEMS ON  
SECOND LEVEL WITH LARGE  
SPACES

4a  
 4b  
 2c

Spring 1998 Wednesday June 10  
 Thesis Juries Graduate and Undergraduate  
 Department of Architecture - CALA

Outside East & North

Moderator: Parker

Jurors: Satkowski, Franck, Fisher, Mack, Dimond, LaDouceur, LaVine, James, Piotrowski, Tollefson

2:00 Steve Rabatin  
 Homeless School  
 Piotrowski, Fisher, Weeks

to  
 break out spaces not directly connected  
 classrooms.  
 space of from land not. a homeless school.

Why is this problem organized differently from a conventional school?  
 What are the unique needs of homeless kids? How are these needs manifested in the organization of the school?

When Aldo van Eyck organized the playground on the home for single mothers (which has a school in it) he took a particular attitude toward the logic of the interior of the building.

- a) why is a street a good organizational device for homeless kids
- b) street is a complex architectural construct which addresses problems of reciprocity, public & private, containment, structure of the whole, continuity etc.  
 Why is this a street not a hallway?

you

Spring 1998 Wednesday June 10  
Thesis Juries Graduate and Undergraduate  
Department of Architecture - CALA

Jury 4

Outside West & South

Moderator: Rauma

Jurors: Blanski, Whitcomb, Guzowski, Wilkins, Chen, Fuller, Quigley, Weeks, Heshmati

10:00 Stephen ~~Blanski~~ RABATIN 4A & B.

~~Blanski~~ Homeless

~~Blanski, Petersen, Blanski~~ PIOTROWSKI, FISHER, WEEKS

Emphasis on resolving cycle of decline.  
curriculum emphasizing order, task, social skills - citizen  
- because of loss of structure...

City - society of spaces + city structure as INSIGHT to ISSUE.

- street as place to learn, observe, socialize.
- campo/space w/ prospect.
- balcony. overlook/prospect.

Nicely controlled verbal presentation couples w/ crisp drawings of the plan/ elev. and section; there is a disjointed character in these sections/ elevations drawings - they are overly mechanical and the sense of the street/door and social order seems to get lost. (this is most true in interior elevation and the interior storage wall [it needs shade, texture, etc.])

The sense of the flex in the plan (relaxed) and the mix of form and space (moving back & forth) and various scales is quite

Represents a solid effort - the ideas probably needed more designing, more exploration of their independent purpose as opposed to their FIT into the old street/courtyard scheme...

The garden wall is in need of architectural development

Representation - more color, shade... it is so specific (material: sig qualities) now there is a lot of discussion about what else it should be. I feel the designed atmosphere is superb.

Spring 1998 Wednesday June 10  
Thesis Juries Graduate and Undergraduate  
Department of Architecture - CALA

Jury 3

Outside East & North

Moderator: Parker

Jurors: Satkowski, Franck, Fisher, Mack, Dimond, LaDouceur, LaVine, James, Piotrowski, Tollefson

2:00 Steve Rabatin

Homeless School

Piotrowski, Fisher, Weeks

---

HOMELESS CHILD

- FOOD, SHELTER, MENTORING & SOCIALIZATION
- RESPONSIBILITIES & DUTIES

PROGRAM

~~WHY A STREET?~~  
WHY A STREET?

A	5
B	6
C	1

Spring 1998 Wednesday June 10  
Thesis Juries Graduate and Undergraduate  
Department of Architecture - CALA

Jury 3

Outside East & North

Moderator: Parker

Jurors: Satkowski, Franck, Fisher, Mack, Dimond, LaDouceur, LaVine, James, Piotrowski, Tollefson

2:00 Steve Rabatin  
Homeless School  
Piotrowski, Fisher, Weeks

1A-1B

- Homeless child
- curriculum
- city
  
- Old Ni-Waukee Freighthouse  
"street design, 'camp' feel
  
- very interactive, very thought provoking
- problem directly linked to a real social problem
- "street" design (physically, socially): really interesting, starting point

Spring 1998 Wednesday June 10  
Thesis Juries Graduate and Undergraduate  
Department of Architecture - CALA

Jury 3  
Outside East & North  
Moderator: Parker

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2:00 Steve Rabatin  
Homeless School  
Piotrowski, Fisher, Weeks

10A } Possible Thesis Award Candidate  
2B }

Idea of the freight-house as a datum is an interesting idea.



I like the way you begin w/  
the axial geometry and break  
out into area towards  
the train depot!! - Good.

The massing on the word model is very strong... I like the fenestration on the south wall of the building, (the north elevation is somewhat less convincing for me).

It would be desirable to show a little more on the context in your elevation and section drawing of your design.

The multiple materials on the facade could be an interesting... maybe show with a larger scale elevation drawing.

I like the "community cluster" concept of the way the room blocks align on the street.

The way the exterior of the building works with the visual context is really "smashing"...

Very mature articulation of the forms and spatial expression. --- NICE!

Spring 1998 Wednesday June 10  
Thesis Juries Graduate and Undergraduate  
Department of Architecture - CALA

Jury 3

Outside East & North

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2:00 Steve Rabatin

Homeless School

Piotrowski, Fisher, Weeks

BA/4/20/

like Red Freight House Head House - respect?



Relevance of Head House to design?

Code issues - secondary egress from second floor? Accessibility?

South elev. - "urban" - or "Disneyland"? Can't be seen  
due to closeness of wall

"Street" organization - appropriate?

Is the school any different from any other  
small school?

Spring 1998 Wednesday June 10  
Thesis Juries Graduate and Undergraduate  
Department of Architecture - CALA

Jury 3

Outside East & North

Moderator: Parker

Jurors: Satkowski, Franck, Fisher, Mack, Dimond, LaDouceur, LaVine, James, Piotrowski, Tollefson

2:00 Steve Rabatin

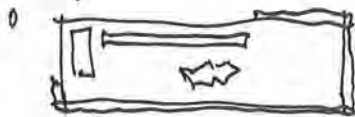
Homeless School - elementary + 5<sup>th</sup>

Piotrowski, Fisher, Weeks

2/4

• child  
• curriculum street - interaction  
• city

- o Formal sense of wall - classrooms are part of that wall? wall creates platform of space that less structured activities take place within?
- o Does the "street" blend/merge with the grounds of school - notion of garden



- o Wall can define a place of refuge from the "risk" + danger of life growing up in the city
- o Beautifully developed Materials. Model & drawings well developed + clear articulate presentation good work!