A Community School Renovation For: Briarglen Elementary

Education, community, architecture.
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Table of Contents:

Community School Concept 3-10
Urban Analysis 11
Site Analysis 12
Plan Analysis 13
Renovation Plans 14-19
Design Renovation Imagery 20-24
Traffic Flow Suggestions 25
Playground and CAPS 26
Phasing 27

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Kindergarten Classroom at Briarglen Elementary. The number one issue for the classrooms is providing adequate space, and the best possible layout for the kids in their learning environment.

Teaching and learning are the constant and dynamic goal we have as a nation for our youth. As a society, we recognize the goal of education with such prominence, that we readily invest our tax dollars, and our time debating the validity of different pedagogical techniques. However, one primary issue that needs to be addressed is the architecture creating the environment for learning. In particular, how can we create spaces promoting a learning environment? How do we design, and modify buildings that enforce interaction between parents, students, teachers, and community?

The typical school has the opportunity to become the center of its community. This core idea, an educational facility as a community hub, provides children the most important component of learning – being both physically and emotional prepared to absorb knowledge. The community school, and all of its elements are ultimately tied to the idea of creating an environment that prepares a students to discovery the opportunities of education.
The computer lab (above) and library (below). The library is the current “hub” for the building, and acts as the core for circulation along with the cafeteria.

Briarglen Elementary Community Schools:

Education is the entryway to opportunity. Using architecture to create the best possible scenario to enhance learning preparedness is crucial. The architecture of a community school should perform several key tasks, defined by the National Clearinghouse for Educational Facilities Knowledworks Foundation, by:

- **Enhancing** the capability to teach, and accommodate the needs of all learners.
- Creating a learning environment that serves as the **center** of the community.
- Becoming architecture that engages and **involves** the community and its interests.
- Promoting a sense of **health, safety, and security** is imperative to increase educational potential.
- Effectively using all of the available **resources** to improve and enhance education.
- Remaining **adaptable** for future demands of both education and community.
Briarglen Elementary

Enhance:

Learning is not a passive process, it is an active process. As a result, the classroom that enhances education needs to be a space that is flexible, adaptable, and can provide the opportunities for interactive education. When looking at a renovation project like Briarglen, it is important to evaluate the existing facility, demographic composition of the community, and the educational methods the faculty implements.

The design changes to the classrooms at Briarglen are:
- Providing natural light where possible.
- Reroute circulation to not pass through classrooms.
- Remove bathrooms from class “clusters.”
- Add bathrooms in shared areas.

Teachers need efficiency in their workspace and classroom to meet the demands of their curriculum. In particular to Briarglen:
- The faculty needs storage – many of the rooms have none.
- A dedicated conference or meeting location.
- Smaller meetings rooms for faculty or parent meetings.

For the students to learn, the parents need to be engaged in the school. To enhance the education process, the school must be accommodating and inviting to parents. To achieve this, Briarglen needs:
- An improved and clear entry sequence.
- Adequate signage, in both English and Spanish.
- Improved circulation at the pick-up drop off points.
- An arrangement and security system that promotes safety.
- A parent reception area.
The playground at Briarglen has already become a center for the community, acting as the evening park for the neighborhood.

The playground area, through the community school design process, should evolve itself into a park for the community, and become more than a playground for the school students.

Briarglen Elementary Center:


An educational facility should fully embrace its context, and its community. It is necessary to do this to create a sense of belonging, and attachment to a facility that is involved with a major portion of the development of our youth.

Briarglen can embrace its community by:

- Not assuming all communities are the same, but molding itself with the attributes of its context.
- Understanding its significance as an urban landmark.
- Providing a place of connection between parents, staff, and children.
- Helping fulfill the needs of the community.

There are several items specific to Briarglen that can help the school become a center for the community:

- Help to transform the playground into a community park.
- Providing meeting locations and educational opportunities for adults in the school district.
- Improving the front entry to become a focal point.
- Improve the safety of the drop off and pick-up locations.
- Provide locations for continuing education.
The connection area between the gymnasium and main building is a major cross road of circulation. This space is the major control point for security into the school, and is also one of the biggest security problem areas. It detaches the gym from the schools major secure check point at the administration offices.

Briarglen Elementary

Involve:

A public school has the opportunity to embrace and create a feeling of inclusion throughout its community. The feeling of inclusion reinforces the idea that both schools and parents share in the responsibility of the education of children. The involvement with the school becomes increasingly important in an urban area, like Briarglen, where student rollover happens at an extremely high rate. As teachers have little time to build relationships with students, a connection to family and community becomes increasingly important to create a sense of comfort, well being, and an atmosphere to learn.

Needs specific to Briarglen:

- Creating a better locations for parents and teachers to meet.
- Creating a location for a therapist office.
- Expanding the kitchen area (or creating a new kitchen) to allow for health and cooking community classes.
- Providing “flex” space for the community.
- Other continuing education classes for: Computers, Health, English, Library Skills, etc.

“... when teachers make parent involvement part of their regular teaching practice, parents increase their interactions with their children at home, feel more positive about their abilities to help their children in the elementary grades, and rate the teachers as better teachers overall...”
- Joyce Epstein, School, Family and Community Partnerships.
One of the many hallways with lockers at Briarglen. Re-orienting the halls for longer views, and easier navigation would greatly improve the overall circulation.

**At Briarglen, several specific concerns need to be addressed:**

- A therapist office coordinated with the administration, school counselor, and nurse offices to provide support for students and parents.
- Clearly defined circulation for ease of navigation.
- Long site lines through the building to create a more “open” feeling.
- Improvement of the connection between gym and main building, with a focus on security.
- Clear entry sequence providing security point for visitors.
- Additional class rooms to help minimize crowding, and maximize student teacher interaction.
- Increased community use in the evening.
- Isolate the community school “wing” for security within the building after hours.

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**Briarglen Elementary**

**Health Safety and Security:**

A child and their family must be physically and mentally **healthy** to be prepared to learn. Necessary services need to be provided within the community school to aid in both aspects of well being. At times a nurse and counselor are not enough...the community school may actually need to provide a medical clinic, and a therapist to help with the health of both the students, and their family.

A sense of **safety** within the community school is imperative to create trust with both the students and their parents. Safety accommodates protection of children and staff from environmental factors, ensures building codes and workplace standards are met, and adequately creates and promotes a sense that the spaces, class rooms, hallways and etc. are well lit, well marked, and have an open feeling throughout.

**Security** within schools has become a focus of national attention, and has largely changed how schools are designed, occupied and staffed. To improve security, the primary system must be rooted in design and reinforced by the practices of the school. Site lines and entry sequence convey a control point without becoming intimidating, or over bearing, and achieve better results than simply relying on electronic surveillance. Breaking down classes into the smallest possible sizes, along with having “schools within schools” improve the teacher’s direct connection with the children and their parents improving interaction, understanding, and providing foresight. Increased community use through after school programs directly improves security as well. “Since most school violence happens between the hours of three and six p.m., after-school programs have become key components of violence prevention plans.”

- **Schools as Community Centers.**
Briarglen Elementary

Resource:

The public school system must become more adept at utilizing its available resources, as well as becoming a resource for its local community. As a community school, Briarglen can provide opportunities, leverage its location within the community, and create a positive example for the conservation of natural resources.

Resources that Briarglen needs to expand upon:
- Global gardens.
- Kitchen renovation/expansion with a learning area. This will allow for opportunities in learning for health, science, mathematics, etc.
- Creation of a stronger tie to the community by finding available local resources to help with improving the playground, deferred maintenance, learning opportunities.

Resources Briarglen needs to create:
- Kitchen – learning opportunities.
- English learning classes.

Natural Resource Conservation:
- Envelope design.
- Reduction of waste, recycling center.
- Life cycle based design.
- Conservation site design with new construction – water retention and bioswales.

The library space at Briarglen is a very attractive and open space, but might not be located in the best possible spot for the current needs of the school.

(Left) Exit area from the library.

(Right) One of several small classrooms branching off of the library.
The cafeteria at Briarglen is overcrowded, and the kitchen has no room for storage. As a result, storage refrigerators have been located in the cafeteria space, and the kitchen, while working, is lacking both efficiency and the opportunity to become a learning space.

(BLeft) Small areas like this millwork sink station are few within the school. These locations help adapt any class to different needs, and improve efficiency by providing a small convenient work space.

(Right) The class locker storage area has been very successful at Briarglen, and is a simple request to improve storage and flexibility within each classroom.

Briarglen Elementary

Adapt:

While several of the needs at Briarglen are immediate, and most design strategies are regarding current issues, the concept of making the building adaptable for the future is crucial for the success of a community school. As the school evolves over time, the facility must adapt to new methods in education, changes to the community, and fluctuations in student population.

Principles for Briarglen to adopt:

• All new spaces should be built with a flexible “shell” type of structure to allow easy interior renovations.
• “Flex” spaces that can accommodate school activities, as well as social and educational activities for the community.
• Classroom should be adapt to a variety of teaching styles, classes, and methods.
• The kitchen should function as both a class space, and a functioning work space for food preparation.
Briarglen Elementary

Urban Analysis:

The immediate area around Briarglen has a direct impact on the way the school functions. By dissecting the urban area, several indicators provide direction on how the school can grow, opportunities for further connection to the community, and potential concerns that need to be addressed.

The primary urban issues at Briarglen are:

• Two major traffic conflicts - pedestrian and auto - along 121st.
• 121st acts as a minor connective artery between 30th and 41st, this creates dense, and fast moving traffic adjacent to the school.
• The drainage cul-de-sac divides the property into two separate and distinct pieces.
Briarglen Elementary

Site Analysis:

Studying the property at Briarglen, there are several site specific concerns and opportunities:

The primary issues are:

- Major traffic corridor of 121st Street.
- Drainage Cul-de-sac divides the property.
- There are two major areas where car traffic conflicts with pedestrian traffic.
- The student pick-up loop is too short, this puts many cars in the street, where kids cross between cars to meet parents.

The neighborhood of Briarglen Elementary. East 30th at the top of the image, East 41st at the bottom, Garnett Road to the far left, 129th to the right.
Briarglen Elementary

Plan Analysis:

The existing plan at Briarglen has several major issues that are impairing the ability of the school to be as effective as it can be for students, and for the community. The dashed lines overlaying the existing plan overlay the primary, secondary, tertiary circulation routes. The additions to the building added necessary spaces, but did not necessarily clarify spaces, or circulation patterns.

As a result, the existing plan at Briarglen has a series of significant issues that need to be considered in the process of transforming to a community school:

• Improve the classroom areas (highlighted in yellow) which are not functioning well for the faculty or students. Because the school is crowded, the shared spaces have become classrooms, creating a situation of walking through a class to get to a class.
• Clarify circulation.
• Provide long views through the spaces to improve security.
• Provide storage.
• Provide better administrative offices and work spaces.
• Create informal meeting locations for parents and teachers.
• Add community use spaces (therapist, flex room, global garden, etc.).
• Improve entry security point, and create clarity about the entry location.
• Find opportunities for expansion - adding on a new library, new kitchen, and new classrooms.
New schematic floor plan of Briarglen Elementary. The plan includes all new and existing walls - demolished walls are not shown for clarity of the floor plan.

Briarglen Elementary

Plan Opportunities:

The overall building renovation, and the transformation of Briarglen into a community school involve:

- Clarification of circulation.
- Revised circulation allows for long views and improved passive security throughout the building.
- New community spaces which include:
  - New flex room.
  - New cafeteria.
  - New library.
  - Isolated community corridor for security.
  - Linking between Flex/Gym/Cafeteria/Library.
  - Service spaces for community program.
- Seven new classrooms.
- Revisions and renovations to problem classrooms.
- More storage throughout - with associated workspaces.
- New meeting locations for teachers and parents.
- New administration core - consolidating:
  - Principal, Vice Principal offices.
  - Faculty conference.
  - Faculty work room.
  - School nurse.
  - School counselor.
  - Therapist.
  - School support staff.
Briarglen Elementary

Classroom Renovation (1):

This central core of classrooms at Briarglen had several issues that were becoming inhibitors to the learning process. Reworking the classroom spaces has become a major priority, and will provide opportunities to improve the spaces function, and application to the community school concept.

Changes made to the classroom core are:

- Elimination of the circulation problem - passing through a classroom to get to a classroom. *Note: This was accomplished by the removal of the two “shared rooms” on each wing, those spaces have been relocated closer to the entry in the former cafeteria space.
- Removal of restrooms inside of the classroom spaces.
- Creation of an open sink restroom design allowing for easier maintenance, and improved monitoring.
- Addition of a new restroom core for each wing.
- Provide storage and lockers for each classroom.
Briarglen Elementary

Entry Renovation:

The primary “day time” entry to Briarglen is currently wedged between the administrative office area, and gymnasium. This presents two problems: First, it is a bit difficult to find when you park and approach the building. Second, the space is small, it quickly fills up with traffic, and becomes a security problem. Third, the gym is isolated from the security check point at the front desk of the administration area.

With the adoption of the community school concept, several key components needed location for direct access to the entry space. By relocating the existing library and cafeteria, the center of the building opens up to be more accommodating, and allows all of the administration functions to become centralized. This will help improve the interaction between parents and teachers by breaking down the formality of office spaces, and creating a more relaxed, less intimidating environment.

The changes to the front entry include:

• Prominent entry, clarifying the pathway into the building.
• Providing a casual meeting place for parents and teachers.
• Direct access to therapist office.
• Direct access to nurses office.
• Improved transparent security checkpoint for the school.
• Consolidation of all administration functions into entry core.
• Work space for faculty.
• Conference room for faculty.
• Student atrium.

Renovation to the entry at Briaglen, providing a space for parents, informal meetings, security check point, administrative offices, conference room, nurse, therapist, work space, and “staging area” for the kids.
Briarglen Elementary

Community Space:

A flex room for community space is a key component of community integration. Locating this space along the west side of Briarglen creates several opportunities that the school can leverage. First, a corridor isolated from the core of the school allows for evening activities secured from the rest of the facility. This corridor also begins to incorporate additional adjacent spaces that could be integrated into community school programs: gymnasium, cafeteria, library, computer lab. Also off of the corridor are several additional restrooms, office space for the community school coordinator, and extended day school program coordinator.

The community school addition at Briarglen includes:

- New secondary entry and axis connecting key spaces for the community school programs.
- New flex room space with stage, and store front glass facing the public access street to highlight activity within the building.
- Connection of gym, cafeteria, flex room, library, and computer lab.
- Restrooms to serve community school functions.
- Office space for community school coordinator, and extended day school coordinator.

Flex Room addition allows for a community meeting space that is isolated from the school for improved security in the evening, accessible to the school for use, and provides a corridor leading to all major community uses (Flex Room, Gym, Cafeteria, Library, Computer Lab).
Briarglen Elementary

North Renovation:

In the area of expansion to the north side of Briarglen, several functions line up as matching location with opportunity. The existing library has been relocated to make room for a new central entry - the new location allows for interaction with the computer lab, north natural light for reading spaces, and the opportunity to renovate the image of the building on the north facade. Kids will typically move from early recess on the south and east side of the building, through the new corridor adjacent to new classrooms 11 and 12, past the library and into the cafeteria. The new location of the cafeteria removes waste and garbage from the front of the building, and improves the kitchen's ability to receive deliveries. The new global garden space can interact with the kitchen, library (including space for a small garden tool storage area), and create a positive visual impact on the north west side.

The north renovation includes:

- Addition two new classrooms
- Relocation and expansion of kitchen and library.
- Global garden.
- New bathrooms (north east).
- New corridor connecting playground to cafeteria.
- New storage spaces.
- New faculty work rooms.
- Enlarged kitchen space to serve as class room, and community continuing education space.

Renovations on the north end of the elementary school allow the transformation at the entry, and the consolidation of the administration functions into a central location. Because of this, and the opportunity to isolate construction to the back of the building, this part of the renovation should be slated for an early phase of construction.
Briarglen Elementary

Kindergarten Core Renovation:

Currently, the kindergarten classrooms at Briarglen are working fairly well. However, as in other spaces, increased numbers of students has required a classroom to be set up in what was once a shared space. This, as in other situations, means disrupting students by walking through their space, to get to another classroom. To improve this situation, the nurse station can move to the new entry and administration core, opening up space for additional rooms. Next, by centrally locating bathrooms and using an open sink design, the bathrooms become more secure, and easier to monitor. Finally, security with kindergarten kids involves both people coming in, and children getting out. Because of both concerns, one additional secure day is provided at the entrance to the kindergarten spaces, adjacent to a faculty work space that is open to the location of the secure door.

The redesign kindergarten core includes:

- New consolidated open sink restrooms.
- New shared space.
- New faculty work room.
- New faculty work space.
- New security check point.
- Relocation of existing nurses office to create an additional class room.

Renovation to the East Wing of Classrooms: Showing additional classrooms, the renovation of the nurse’s office back to classrooms, and reworking circulation.
Briarglen Elementary
Entry Renovation:

• Community
• Connection
• Link
• Integrate
• Motion
• Involve
• Explore
• Node
• Energize
• Flex
• Dynamics
• Wrap
• Creative
• Encourage
• Center
• Promote
• Discover
• Potential
• Educate

Renovated South Elevation.
Briarglen Elementary

Architectural Opportunities:

• Providing a new prominent entry at Briarglen will help direct visitors to the school to the correct location. By providing a clerestory to the west, the morning sunlight will not come directly into the space, but be filtered by the overhanging form. The clerestory and additional windows at the front entry will provide for a warmer, more comfortable feel at the schools new entry.

• The new flex space (left side of both images) is a large open room with a stage on the interior, or corridor side of the space. This creates a natural stage lighting effect as the sun drops in the wester sky, shining the sun directly to the stage or presentation area, and not in the eyes of the audience. The glass exposure also promotes the building as a community center of action by revealing the flex room, and its activities, to the traffic on 121st Street.

• More natural light is a running theme across the entry elevation. Currently, Briarglen is a big box, with little natural light in the center of the building. By providing windows at the entry core, and two extended clerestories into the volume of the box, natural daylight will start to matriculate deeper into the volume of the school.
Briarglen Elementary
Architectural Opportunities:

• The angled forms on the renovated elevation are acting as an architectural metaphor for the community school concept. Linking and interconnected forms wrap around the entry spaces, visually referring to the idea that the school should be an integral part of its local community.

• The community core entry to the flex room, gym, and cafeteria spaces is set further back into the front elevation, keeping the visual prominence on the main entry. The deep recessed entry still provides a deep sense of shelter, moving people gradually from exterior to interior space. In the evening, when this space becomes the primary entry to Briarglen, additional lighting in the corridor will give the entry and clerestory a glowing quality that should direct visitors to the right location.

• With the addition of more windows on the elevation, the new interlocking forms are designed to act as sun shades to prevent glare and heat gain into the waiting and gathering spaces at the front entries. Most of the shapes are simple light weight structures applied to the existing masonry facade, or are located within the areas of new construction.

• All shapes and entries work with existing sidewalk locations to help with the economy of construction, and help reduce waste during demolition.
Briarglen Elementary

Architectural Opportunities:

• The new lobby and informal parent teacher meeting location provides for a more spacious entry for Briarglen. The room will allow for the morning time congregation of students, parents, teachers, and staff before the school opens each morning.

• A secure checkpoint is provided at the administration desk. The doors leading from the lobby, to the student atrium would remain locked at all times, only allowing guests or parents in after signing in at the desk. This is the most important security eliminate in place for schools - but it should not feel like a barrier, or the entry to a jail. It needs to simply be a transparent gateway into the secure locations of the school.

• Maintaining a high degree of transparency through the school, down corridors, and into different spaces is an important factor in security. It allows for observation over a large area with minimal staff, and creates a sense of security for the students and visitors. The lobby is designed to be open to the student atrium, and transparent all the way down the main corridor to the new library on the north end of the building. The new teacher conference room is open to the adjacent spaces, and the faculty work space is separated by a half wall concealing printers, cabinets, and work areas from the entry space.

• Direct access is provided to both the school nurse, and the community school therapist from the entry lobby. This allows either function to be operated after normal hours of operation, with the rest of the school locked.
Briarglen Elementary
Architectural Opportunities:

- The new community corridor is designed to feel open, and to act as a community space in itself, not just a large hallway. The addition of an east facing clerestory will bring in filtered light during the typical function hours in the evening. The space includes new restrooms, a connection to the community school coordinators office, and extended day school coordinators office. The corridor also links the flex room, gymnasium, cafeteria, library, and computer lab.

- The space is connected to, but separated by lockable doors from the student atrium. Typically, the front entry to the community corridor would be locked, allowing student access to the flex room, gym, and all other spaces along the community corridor. In special circumstances though, the spaces could be managed allowing the community spaces to be used, without having access to the school.

- The flex room is designed for the purpose of anything. The space is a big open room, with a little over 400 square feet of storage, and could be used for classes, meetings, presentations, or events.

- Interlocking shapes continue to make their way down the corridor, opening locations for display cases, recessed lighting or light shelves, and providing locations for signs and directions.
After school as Briarglen lets out, there is a major traffic issue - multiple cars picking up kids, cars parking on both sides of a busy connection street (121st), students cross the street in uncontrolled locations between cars, and there is not enough room in the pick-up loop. There is only one bus that serves the school, and it has a major portion of the drive currently dedicated as a bus lane. Consolidating the bus lane as part of the pick-up loop provides relief to the overflow of traffic. Extending the parking area to the east creates a great deal of additional parking, and provides for additional queuing of automobiles. Added together, the situation becomes much more controllable, with autos and kids intersecting in only one key location, north of the school. Moving a crossing guard to this location will help ensure safety of the kids, and ideally responsible driving by the adults.

Key elements to the traffic flow redesign at Briarglen are:

- Extending the existing parking 100’+ to the east.
- Creating a connection between the bus loop, and pick-up loop, and directing traffic through the bus loop.
- Relocating bus pick-up north of the school.
- Relocating the crossing guard to the north of the school.
- Forcing traffic to make a right after exiting the pick-up loop to decrease traffic on 121st west of the school.
- Creation of a no parking zone south bound on 121st - this will ensure that kids are not crossing the street to their waiting cars.
Briarglen Elementary
Playground to Park and CAPS:

The existing playground at Briarglen has several elements that work well for the students, but don’t necessarily respond to what the area could mean for the community. In looking at the urban analysis on page 9, one can observe that there is no public park, or large outdoor space for the residence in the surrounding community. The current playground becomes a “park by default” each evening, as the local residence use the track, and large outdoor space for a primary location for recreation. To further enhance the use, the school could provide several key items to improve the playground to park transformation, to improve Briarglen’s ability to act as a community school.

Key additions to the playground to park transformation:

- Addition of a 1/2 size regulation soccer field with goals.
- Creation of a 3/4 size baseball field with backstop.
- Providing a pavilion along the east side of the playground.
- Addition of benches along key locations at the perimeter.
- Reworking the track location (existing track is the light gray line) to allow room for soccer and baseball fields.
- Supplying adequate lighting for security during evening activities.
- Addition of new trees planted in key locations to provide shading, and improve the quality of the spaces within the park.

On the Southern edge of the property is enough room for a new CAPS facility for early childhood education. The CAPS facility for early childhood education is shown as an approximate 6000 square feet, with required parking, and play area on the south east of the building. Employee parking on the east, visitor and overflow parking on the west.
Briarglen Elementary

Expansion Phasing:

**Phase One** reworks the existing classroom configuration, and adding storage to the north wing. This need is immediate, and could be started and completed with minimal interruption.

**Phase Two** is the addition and relocation of a new Library and Cafeteria/Kitchen, and potentially the addition of a Flex Room. Phase two allows for the relocation of phase 3.

**Phase Three** relocates and expands the administration offices, nurses office, new conference room, therapist office and new front entry.

**Phase Four** creates a series of new classrooms and the appropriate support space (work rooms and restrooms) to help expand the school, and decrease the number of students per classroom.