FULL CIRCLE: RETURNING SANDS SCHOOL TO THE WEST END COMMUNITY FROM NEIGHBORHOOD ELEMENTARY SCHOOL TO COMMUNITY CENTER AND ELDERLY HOUSING

Alison J Hovey
Professor Bob Fisher
thesis studio instructor
Associate Professor Carol A. Flores, Ph.D.
thesis advisor
Associate Professor Cheryl Bove, Ph.D.
thesis advisor
Spring 2000

Like most public school boards in the United States, the Cincinnati Board of Education was recently faced with the necessity of closing several of its outdated school buildings. Sands Montessori School was one of the buildings on the list of "surplus" buildings, released by the school board on November 18, 1999, as part of a $112 million facility upgrade. Sands Montessori School is a significant historic building, eligible for the National Register of Historic Places, and should be saved. It is in the Dayton Street Historic District and has been an important part of the West End Community and the City of Cincinnati for 88 years.

BACKGROUND
The senior population in Cincinnati, like the rest of the United States, is constantly increasing. Not only are people living longer, but they are also living healthier. The need for housing and activities for seniors is growing with the increasing age of the population. At the same time, as housing needs increase, urban areas such as the West End are being revitalized and restored; people are coming back to the city.

In spite of the number of people returning to live in the city, the population of the Cincinnati Public Schools is decreasing. Many students are being enrolled in private schools instead of public. The combination of declining enrollment, deteriorating school buildings, and the lack of funds to fix them has led to the Cincinnati Board of Education proposal to relocate several programs and to close several schools. Sands School is one of those slated for closure.

“We only multiple use can offer the economic muscle which justifies preservation.”

“We do not go into art museums, take paintings off the wall, throw them to the ground, and stomp on them, or invite a hack artist to paint over the canvas. Yet society so often allows masterpieces of architecture - compact and charming or grand and inspiring - to be destroyed or altered as though real estate ownership supercedes any other value system.”
- Potter, 1996.

Alison J. Hovey
In areas immediately surrounding downtown, there are currently several residential renovation projects. These renovations target a variety of different financial brackets—from those in subsidized housing to successful young professionals and established families. While several community leaders foresee the continual suburbanization of the city, they also see a renewed interest in urban living.

I propose that Sands Montessori School be rehabilitated and reused as a community center and independent elderly housing for the West End community. Because of its National Register eligibility, the reuse program follows the Secretary of Interior Standards for Rehabilitation. An integral part of the reuse program is the inclusion of new mechanical, electrical, security, and vertical transport systems in a way that is sensitive to the historic character of Sands School. Moreover, an integral part of making the building work is the promotion of interaction between various age groups and backgrounds.

The conversion of Sands Montessori School into Elderly Housing and a Community Center will help meet the growing need for senior services in the city center, while saving an architecturally and socially significant neighborhood landmark.

**THE BUILDING**

Sands Montessori School has been a fixture in the West End neighborhood of Cincinnati since 1912. Prior to its construction, a school had been on the site for over 60 years. The building makes a significant contribution to the historic character of the West End neighborhood and the Dayton Street Historic District, in which it sits. Sands Montessori School is also significant architecturally because it is an excellent example of the traditional style of school building popular at the turn of the century. Sands School is also the earliest surviving example of the educational facility work of the local architectural firm Tietig & Lee Architects.

Construction on Sands School was begun in 1910 on the site of two previous school buildings for District 14 of the Cincinnati Public Schools. The neighborhood school on the site was built in 1851. In 1862, this structure was demolished and replaced with a larger, brick building. As the West End neighborhood continued to grow and thrive, this school also became too small for the community’s needs. In 1910, the second school building was demolished and construction was begun on the current school building.

On December 23, 1912, the students of Sands School ceremonially entered their new school building for the first time. The school had been completed at the cost of $290,000 while they were temporarily taking classes in the old District 11 school building. When the kindergarten through eighth grade students moved into their new school building in 1912, it was the first elementary school building in Cincinnati to have plunge pools. Up until that time only the high schools had been built with pools. Sands School is also the only school in the city to have had the playground on the roof. The decision was made for the playground to be on the roof of the

Alison J. Hovey
school because the larger school building did not allow for room on the school board property for a playground. This situation was remedied when a playground was constructed on neighboring city property in May of 1934.

The George F. Sands School was dedicated on May 24, 1913 with much fanfare. Guests included thousands of West End neighbors of all ages.

The Sands School building was maintained and operated as it was originally constructed for the surrounding neighborhoods until its conversion into the first public Montessori school in the nation in 1979. In March of 1979, the fourth through sixth graders of Sands were relocated to Heberle neighborhood school a few blocks north on Freeman Avenue. The school continued to operate as renovations were taking place. In May of 1979 the first through third graders and the principal of Sands relocated to Heberle, and the Montessori program at Heberle was moved into the renovated Sands School building. The Montessori classrooms from several other Cincinnati Public Schools were eventually relocated into Sands, forming Sands Montessori School. This centralized all of the Cincinnati Public Schools' Montessori programs into one school, creating the first all Montessori public school in the nation.

PRECEDENT

In my observation of senior centers in the Cincinnati area, I discovered that the activities the programs offered and the ease of getting to the site makes a senior center successful. Both the centers I looked at were owned by the Cincinnati Recreation Commission, and consisted of a multipurpose room with adjoining kitchen and directors office. Both were located in areas of active seniors — Rowe Stanley is in a senior housing high rise; Oakley is in a neighborhood full of seniors who raised families there. Both centers can be characterized as having cold, hard floors, acoustical tile hung ceilings with fluorescent lighting, furnished with hard plastic chairs at plastic-laminate cafeteria tables and a few couches and softer chairs for T.V. viewing. Both have access to adjacent outdoor patios and minimal natural lighting. Despite the generally unattractive, institutional settings and easy-to-ac-
cess location similar to both facilities, the Oakley Senior Center is much more successful. This is because the Oakley Senior Center provides regularly scheduled programs and activities, while the Rowe Stanley Senior Center rarely has organized activities scheduled. More than an attractive setting, having a regular schedule of activities seems to be the key to the success of a senior center. This does not mean that an enjoyable physical setting is not important—in fact it would probably further improve the success of any senior center. This having been said, the architectural issues of designing a successful senior center become a focus on providing a facility in which a variety of activities, such as dancing, exercise, ceramics, card games, T.V. watching, dining and just sitting, are accommodated in the best possible way. The issue of creating a secure environment, which fosters social interaction, is the primary goal.

In elderly housing, most tenants are looking for an easy-to-manage, easy-to-access place with many aspects similar to their former home. The average senior has lived in the same house for at least 15 years, often times longer. When the larger homes in which they raised a family become too much to manage, seniors often want to stay in the same neighborhood in a place of similar character to the home they are used to. For many, moving into an apartment feels like a huge step down in society; however, if an elderly housing facility can be made similar in character and quality to the surrounding housing the transition can be made more comfortably.

The housing in the area around Sands consists of late 19th century rowhouses. Most houses have either very small yards, or no yard. Most parking is along the street; however, many people rely solely on public transportation. These older homes are typically brick construction with high ceilings, plaster walls and ceilings, large operable windows, and radiant heating. Most of these features are present in the Sands building at a slightly larger scale than in the adjacent housing. Because of the similar qualities of the adjacent housing and Sands, I feel the building is an ideal candidate for conversion into congregate housing for independent elderly. The character of the building provided by high ceilings, large windows and radiant heating should be maintained while providing a division of spaces common to apartments and amenities expected in elderly housing, such as easy-to-reach electrical outlets, air conditioning, emergency assistance pullcords and accessible features—especially in the bathroom.

Examples of elderly housing represented in books and magazines focus on security, ease of movement within the spaces, ease of reach for outlets and storage, and the maximization of natural lighting. All of these important aspects were incorporated in the design of the Sands Montessori adaptive reuse.

THE CLIENTS
The independent elderly housing will primarily attract people who have raised families in the West End, Over-the-Rhine, Queensgate and other nearby urban communities. Occupants will primarily be people who no longer need the space associated with a single-family or two-family house, but who are still capable of taking care of a small household.

With the increasing age of our society, it is likely that most inhabitants will be in their 70s, yet still in good health. Because of the nature of existing housing in the area, most residents will be in the lower financial bracket. In order to accommodate the financial needs of probable residents, rents will need to be competitive with nearby subsidized elderly housing. Including utilities, this is currently about $275 per month for efficiencies, $325 per month for one-bedrooms and $400 per month for two-bedrooms. This development can probably charge slightly higher rents because the units will be of a higher quality and will be accompanied by a strong supporting recreational and senior assistance program in the accompanying Community Center.

Alison J. Hovey
Many occupants probably will not own cars and will be familiar with the public transportation system, and able to use it well to meet their needs. Users will be able to live independently, or with assistance from providers hired by the resident. This means they will meet all the requirements for independent living listed in Table 1, and will be able and willing to participate in at least some of the social activities provided by the Community Center.

The Community Center will be available to all elderly in the surrounding area who wish to participate in the regularly scheduled activities. Most participants will come from within a half-mile of the building, but special activities may draw people from other community centers and neighborhoods.

### REQUIREMENTS FOR INDEPENDENT LIVING

1. Able to prepare adequate meals independently. Eats without assistance.
2. Maintains home alone or with occasional help with heavy work.
3. Is mobile without any aids. Can walk 6 to 8 blocks and climb stairs.
5. Medications — is responsible for taking medications in correct dosages at correct times without assistance.
6. Has little or no difficulty with time, place, and person orientation.
7. Able to participate fully in planning and exercising good judgement in decision making or substantially intact — capable of participating in planning and decision making with minor dependence on others.
8. Apparently free of anxiety, depression, phobias, or paranoia, or symptoms may be present in minor form but do not significantly hinder daily functioning.
9. Use of alcohol or drugs is not abusive.
10. Is aware of and practices routine safety measures without reminders or teaching assistance.
11. Obtains own groceries and other items needed for daily living.
12. Manages financial matters independently (budgets, writes and cashes checks, pays rent and bills, goes to bank, collects and keeps track of income).
13. Travels independently on public transportation or drives own car.
15. Dressing — dresses, undresses, and selects clothes from own wardrobe with no or very minor assistance.
16. Grooming — neatness, hair, nails, hands, face, and clothing. Always neatly dressed, well groomed without assistance.
17. Free of disturbing, disabling character traits or personal habits; grooming and dress reflect good hygiene and interest in personal appearance, or mildly disturbing character traits which would not significantly impair capacity for group living, acceptable personal habits.
18. Maintains satisfactory relationships with family, friends, and other residents. May be becoming less active in sustaining them.
19. Is able to speak, hear, read and write with little or no difficulty.
20. Able to dial and converse over the telephone, and intercom. Able to look up numbers.

(Table 1 from Gimmy, 1988.)
In continuing educational service to the West End Community, a preschool will continue to operate on the ground floor of the building. Not only will the preschool continue to provide early educational opportunities for the community, but it will also provide multigenerational interaction. Multigenerational activities will help foster respect for elders in the younger generation and will provide enjoyable interaction for all generations. The interaction between generations has been shown to be beneficial in many other programs. Many Senior Centers have incorporated youth facilities in them as well – including the Oakley Senior Center, run by the Cincinnati Recreation Commission.

The support staff of the Elderly Housing, Community Center, and Preschool are the other primary users of the facility. This staff includes several preschool teachers and assistants, a janitorial staff, property manager, assistant manager, administrative assistant, events coordinator, visiting health care providers, visiting social workers, part-time barber, part-time beautician, food preparation and clean-up staff for daily lunches, and on-call social workers, nurses, and repair men to respond to occasional special needs. An additional staff of volunteers will be important to the operation of this nonprofit facility. Part time instructors will also be needed for specialized activities including ceramics, textiles, tai chi, and other physical and creative activities.

LOCATION
Sands Montessori School is located on the city block bounded by Poplar Street, Freeman Avenue, Livingston Street, and Baymiller Street. The building occupies approximately one third of the block; additional space is devoted to parking and playgrounds.

Immediately south of the building is the West End Community Garden. South of the site is low-rise section 8 housing. The West Cincinnati Presbyterian Church is to the east, on Baymiller. Turn-of-the-century row houses are to the north of the site, with a day care center and playgrounds directly north of the building. Directly west is a row of turn-of-the-century buildings, half of them unoccupied, one occupied by a privately owned convenience store. Interstate 75 is a block to the west, with entrance and exit ramps a few blocks north and south. At the corner of Poplar and Linn Streets is high rise elderly and section 8 housing. The fire station is at the corner of Linn and Liberty. The West End Community Center is a few blocks north on Linn Street. Heberle Elementary is a few blocks north on Freeman

Alison J. Hovey
Avenue.
The building is approximately 200 feet by 150 feet, set back approximately 100 feet from Poplar Street and raised several feet from street level. Tietig and Lee Architects originally constructed it in 1912 in the Neo-Classical Revival style. Although it is not on the National Register, it has National Register potential and sits in a neighborhood that is part of the Dayton Street Historic District. There are three floors of classrooms. The special features on the ground floor are the kitchen, boiler room, and two abandoned swimming pools. The entry to the elaborate auditorium is on the first floor. The entrance to the gymnasium is raised several steps above the second floor. Ceiling heights in typical rooms range from 12'-0" to 12'-6". The auditorium and gymnasium are one and a half stories tall each. There is one elevator adjacent to the northeast stairwell that connects the ground floor through the third floor. The two northern stairwells continue up to the roof deck.

SOCIAL AND PHYSICAL CONTEXT
The building is located in the Dayton Street Historic District, but is also near several low-income housing projects. There is a wide variety of building stock in the area ranging from mid-century high rises to turn-of-the-century row houses, but the majority of the residents are lower class minorities. Public transportation and interstate access are both readily available. Amenities such as grocery stores and doctors offices do not appear to be a part of the community, although efforts are being made to attract a chain grocery store to the Linn Street commercial district.
Views from the building include the downtown Cincinnati skyline to the southeast and Union Terminal to the southwest. The neighborhood is fairly close to such cultural attractions as the Museum Center at Union Terminal and Music Hall. It is within walking distance of the main post office and the local fire station, as well as some restaurants, convenience stores, and Walgreen's Pharmacy.

Alison J. Hovey
GOALS AND OBJECTIVES

- Create community involvement in this complex of private residences.
- Allow for interaction between different age groups.
  - preschool
  - after-school programs for neighborhood kids
  - community meetings
  - seniors living at Sands and in the surrounding community
- Provide the West End community with needed services including:
  - adult health care
  - performance space
  - meeting space
  - low-cost meals for elderly
  - preschool
  - facilities for the Arts Consortium
  - quality low-cost housing for elderly who no longer need the space associated with a single family home
  - continuing education / parenting classes
- Allow access to the public spaces on all floors and security to the residents and preschool areas.
- Sensitive inclusion of new mechanical systems so as to not destroy the character of the building.
- Maintain the historic features of the building as much as possible.
- Create a secure, active environment for the community.

DESIGN CRITERIA

The design of the reuse of Sands Montessori School as a Community Center and Congregate Independent Elderly Housing will respect the significant historic character of the building while incorporating all necessary systems and spaces. In order to receive Historic Tax Credits and other Federal Aid, which are necessary to make the project economically feasible, the Secretary of Interior's Standards for Rehabilitation, in Table 2, will be followed.

This community facility will address the physical needs of a variety of people, from small preschool age children, to active staff members and residents, to wheelchair bound persons. A comfortable, secure, welcoming environment must be created for all people to enjoy. Abundant natural light, warmly colored interiors, easy to maneuver spaces, and comfortable surfaces are extremely important to the design.

Alison J. Hovey
SECRETARY OF INTERIOR STANDARDS FOR REHABILITATION

1. A property will be used as it was historically or given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Table 2

General Concerns for the Addition of Modern Mechanical and Electrical Systems in Historic Buildings

- Look for existing interstitial space available for the insertion of modern systems.
- Evaluate electrical system. Possibly replace all old wiring.
- Install central air, but keep operable windows.
- Thermostats to control zones of use. Each residence needs control.

Goals and Objectives of System Installation

- Installation should allow for later removal without causing irreversible damage to the historic fabric, to allow for system updates.
- Select the energy system that requires the least intrusion into the historic fabric.
- Introduce the system into the structure so that there is easy access for maintenance and repair.
- Introduce a new system that will compliment the existing, operable historic system.

Making Buildings Work as They Were Intended - Efficienty

- Make sure all windows are functioning correctly, are still operable.
- Make sure all vents are opened, clean, and not blocked.
- Make sure all ducts or heating pipes are clear of debris.

- Inherent energy saving characteristics probably utilized in Sands:
  - use of operable windows for natural ventilation and light
  - ratio of 20% or less between glass and walls
  - the use of interior venetian blinds, curtains and shades
  - the use of heavy masonry walls of large mass and weight which prolongs the time scale of heat transmission - important in both heating and cooling months
  - the use of a heating mechanical system only to supplement the natural energy sources

Alison J. Hovey
General Issues of Energy Conservation in Historic Buildings
- Interior shutters, blinds or curtains can cut down on solar gain but allow in light.
- Interlocking weather-stripping around windows greatly reduces infiltration.
- Repairing windows rather than replacing is generally cheaper and just as efficient.
- Zoned environmental and lighting controls allow unused spaces to not be heated, cooled or lighted.
- Operable windows allow for comfortable interiors in fall and spring when neither heating nor cooling is needed.

Insulation of Walls and Windows
- Adding material to the inside or outside of a building is not very successful in reducing heating and cooling costs. In most cases the losses sustained in covering original materials are not matched by the benefits received from saving them. Materials added to interiors also reduce the usable space in the building.
- Fused Thermal Glass – composed of two sheets of glass whose edges are heat-sealed. Available in smaller sizes and is not as thick as banded glass.
- Caulk around window openings can close cracks and greatly improve the efficiency of the window without much cost.
- Many single glazed windows can be converted permanently to double glazed windows by the addition of a new glazing frame to accept an additional pane of glass. In some instances a sealed double glazing unit can replace a single pane of glass.

Keeping Windows Operable
- Uses less energy because brings in fresh air without artificial means in spring and fall when heating or cooling is not needed.
- Allows for cross ventilation – a cost-effective way of cooling.
- Large windows provide adequate lighting for most tasks during daylight hours so that electric lighting costs are greatly reduced by controlled natural lighting.

Keeping High Ceilings
- High ceilings allow for a gradation of air so that in summer the hot air rises and can be taken out of the building through upper windows. In winter, ceiling fans can be used to bring the heated air back down to the occupied space.

Needed Facilities Nearby
- Post office
- Food shops / grocery
- Doctors
- Dentists
- Pharmacy
- Bank
- Library
- Park
- Church
- A sheltered public transportation stop in view of the center
- Emergency health care (hospital or urgent care)

Spaces to Include in Senior Center
- Lobby / main entrance with 24 hour on-site staff for security and emergency assistance
- Multi-purpose room
- Activity rooms
- Library
- Art – craft room
- Day care
- Laundry
- Physical recreation area
- Swimming pool
- TV and game room
- Communal dining room
- Social service office
- Doctors office / Health care clinic, maybe with pharmacy
- Hairdresser / barber
- Housekeeping and linen service as an extra charge
- A variety of roof gardens: kitchen garden, greenhouse, formal garden, activity garden

Definition
- Congregate Housing – a multi-unit apartment building in which the apartments all have bathrooms and kitchens, and where the management provides some supportive services, such as a dining room where residents can obtain at least one meal a day, optional housekeeping, transportation, and 24 hour (or nightly) watch service. Other communal, social, educational and personal care services are often provided.
Spaces to Include in Living Units
- Living room
- Dining room
- Kitchen
- Bedroom
- Bathroom
- Storage (lack of adequate storage is the most common complaint)

Important Dimensions
- Ramp access 1:20, maximum of 1:12 slope.
- Distance from main entrance to elevator 30’ to 80’.
- Minimum public entry door width 2'-6".
- Minimum apartment unit interior door width 2'-6".
- Minimum hallway width 4'-0".
- 1-bedroom apartment range 450 – 830 sq. ft.
- 2-bedroom apartment range 650 – 1000 sq. ft.
- Light switch heights from 3’ to 3’-6” easier to reach.

Main Entrance Design Criteria
- Clearly visible when entering site.
- Easy to supervise for security and assistance reasons.
- Pedestrian route from site entry to building entry clearly indicated and segregated from vehicular traffic.
- Ramp and stairs should both be provided at any elevation changes.
- Changes in color and texture should warn of changes in elevation.
- External doors need to be easy to open.
- Canopy at entrance to protect vehicle drop-off and pedestrian entry is ideal.
- Air lock at entry preferred. This can also be a security block where people can get inside the building, but only as far as the entry before a security check. Allows for an area protected from the elements for secure check-in.
- Seating with view out is desirable at entrance for viewing while waiting to be picked up.
- Sense of enclosure should increase as you enter the building.
- External stairs ideally 5 1/2" by 1’-3" to allow for walkers and canes.
- Notice boards good in entry lobby.
- Public telephone.
- Coat closet for visitors.

Circulation Design Criteria
- Length of corridor ideally less than 100’ so as not to discourage less able users from moving about the building.
- Corridor widths that are too narrow or too uniform may portray an institutional atmosphere.
- Vary finishes throughout parts of the building to distinguish between spaces and orient people. Themed sculpture or paintings can also help to orient people.
- Highlight apartment entrances with lighting to break down corridor and orient people.

Seating Area Design Criteria
- Layout of main lounge should allow for small and large groups to gather comfortably.
- Should relate to the major circulation area and/or other public activity areas.
- Small kitchen for beverages and snacks good nearby.
- Public toilets nearby.
- Smaller areas off main lounge good for more formal meetings.
- Adjacent to outdoor seating area a plus.
- 39 sq. ft. / resident for main lounge area plus an allowance for public users.

Administration Design Criteria
- Views to communal areas, exterior entry area, and interior entry area.
- Manager’s office, secretary, and reception.

Dining Area Design Criteria
- With independent elderly, most will be able to cook and will want to cook. A dining facility may be more for community members in need of assistance, or as a social event.
- 28 sq. ft. / resident for dining area plus an allowance for public users.
- Kitchen size determined by the number of people served and whether food will be prepared on or off site.
- Separate restroom facilities needed for kitchen staff.
- Kitchen should be away from residences and most activities because of smells and noises associated with it.
- Delivery access needed for kitchen.

Alison J. Hovey
Laundry Area Design Criteria
- Communal laundry needed on each floor.
- Include sinks, washers, dryers, ironing area, folding area, and hanging racks.
- Sitting space adjacent to laundry for waiting.
- Noise and smells associated with laundry need to be isolated.
- 2 washers and 2 dryers needed for every 30 dwellings.

Landscaping Design Criteria
- Incorporate as much variety and "activity" as possible: plants that change with seasons, that move with the wind, that have a variety of colors, and that attracts birds and butterflies are "active."
- Flowering trees and shrubs give the idea of life's rhythms and cycles.
- Protected outdoor seating areas

Environmenental Issues
- Environment should be sensorially loaded to provide for sensory stimulation and to facilitate environmental comprehension.
- Rooftop developments are good for neighborhoods where there is a definite security problem.
- Rooftop gardens add as much as 20% to the property values of a project.
- Rooftop developments are unused or under-used if the natural flow of movement or activity does not continue to the roof.
- Need protection from harsh winds, and excessive sun and glare.
- Rooftop developments should maximize the exceptional views.
- Need easy access to restrooms and drinking fountains.
- Comfortable, sheltered, movable seating a necessity.
- Gardening areas need storage space, water sources, and raised gardening beds.

Parking Criteria
- In urban area, 0.5 space per dwelling unit.
- One handicapped space per 15 units
- Visitor spaces — 6 short-term spaces per 100 units
- Additional parking for community activities.

Lighting
- Minimize glare and silhouetting.
- Consistent overall lighting not recommended because it tends to flatten surfaces.
- Use general and localized task lighting.

Sound
- Because elderly commonly have some hearing loss, they may listen to radio or TV loudly. Sound isolation is important to control this problem.

Alarms
- Should allow residents to alert staff 24-hours a day.
- All dwellings, communal areas, and restrooms should be linked to a central control to call for assistance.
- An alarm system that allows for speaking is good because the degree of the emergency can be made apparent.


Alison J. Hovey
**Apartment - Entrance Area**
- Transition between public and private.
- Allows for visitors to be checked out before entry.
- Area for personal items in entry hall.
- Shelves for mail, keys, etc.
- Adjacent closet for coats.
- Space for chair, or built-in bench, to put on shoes and take them off.

**Apartment - Storage Area**
- Storage needed for clothes, linens, broom/vacuum, and general.
- Easy to reach linen storage from 2'-0" to 4'-7" with 2' deep shelves maximum.
- General storage for suitcases, extra furniture, etc. should not be very deep. May be outside of apartment.

**Apartment - Bathroom**
- Walk-in shower easier to get in and out of than bath, but many prefer bath anyway.
- Doors to bathroom should open outward and be able to be unlocked from the outside by staff if an accident occurs.

**Apartment - Kitchen**
- Adequate storage that is within reach.
- Dishwasher, microwave, oven, stovetop, refrigerator, freezer are necessities.
- For ease of reach, the highest shelf should be no more than 5'-0" high.
- Breakfast bar is enjoyed by many. Can also function as food preparation area.

**SPACE SUMMARY**
- Senior Center Main Floor:
  - Entry Lobby: 1370 sf
  - Restrooms: 410 sf
  - Kitchenette: 54 sf
  - Coat Room: 54 sf
  - Elevator Lobby: 100 sf
  - Mail Room: 170 sf
  - Admin. Offices: 1770 sf
  - Activity Rooms: 1800 sf
  - Dining: 1500 sf
  - Kitchen: 770 sf
  - Art and Craft Room: 975 sf
  - T.V. / Game Room: 870 sf
  - Hairdresser: 290 sf
  - Medical Clinic: 450 sf
  - Cleaning Storage: 200 sf
  - General Storage: 775 sf
  - Mechanical Room: 3250 sf
  - Preschool: 2900 sf

- Net Square Footage: 17,708 sf
- 20% Gross Factor: 21,250 sf

Approximately 21,000 sf available, already including stairs, light wells and mechanical.

**APARTMENT SUMMARY**
- (3) Efficiencies
  - (19) 1 Bedrooms: 400 - 600 sf
  - (15) 2 Bedrooms: 700 - 900 sf
  - 850 - 1050 sf

Alison J. Hovey
Bibliography


Alison J. Hovey
DESIGN PROCESS
The ground floor Community Center plan went through several renditions before a suitable arrangement was found.

The final plan is successful because there is a clear division between the active, west side of the building - with the preschool and art rooms - and the less active, senior oriented, east side. The two sides come together at the pair of central stairs, in the active auditorium and gymnasium spaces above, and in the outdoor gardens and play areas.

This plan is also successful because it takes advantage of the spaces in the existing light courts to create exciting environments for the preschool play space and the dining area.

Spaces more commonly used by the entire West End community are located near the traditional front of the building and can be more easily monitored from nearby administrative offices, also in the front. The barber and health clinics are immediately adjacent to the main entrance, allowing easy access for all community members.

The central core of service spaces and the "rear" service area are maintained and function well in this location with the arrangements of the three floors above. Existing radiator pipe routes, plumbing stacks and ventilating chases are able to be maintained so that the building will not need to be significantly altered in order to include updated heating, ventilating and cooling systems. The new electrical chases will be concealed in a new railing system.

Alison J. Hovey
Ground Floor HVAC Diagram

Second Floor HVAC Diagram

HVAC
The existing radiators will remain as the primary heating source. Ventilation and supplementary heating and cooling will be provided through new ductwork concealed in new plenum spaces. The auditorium and gymnasium will be conditioned with systems that are separate from the rest of the spaces.

First Floor HVAC Diagram

Third Floor HVAC Diagram

Alison J. Hovey
ASSESSMENT
This project has helped to inform people on the numerous possibilities for unwanted school buildings, and other architecturally and historically significant buildings. Hopefully, with community and school board presentations planned in the future, this building will be able to be saved and utilized for the benefit of the community of which it is a part.
FURTHER EXPLORATION

As with every project, there are some aspects of the project that would benefit from further exploration. Some of those things include a more in-depth study of the individual apartments, focusing on the details of the spaces and the character. An even greater utilization of the exciting light courts could have been explored, possibly including observation balconies into the two active spaces. One method of exploration that would have been helpful would have been a large scale model of either the dining area or the play room. Further definition of the exterior landscapes would also be beneficial in making this a more cohesive, exciting environment.
ADDITIONAL THANKS TO:

Ms. Lintz - Sands Montessori School Principal

Norm Kattleman - President of Dayton Street Historic Association
West End Community Council Member
Sands’ Local School Decision Making Committee Member (LSDMC)

Sally Warner - Cincinnati Public Schools School Board Member
Former Sands Parent and LSDMC Member

Fred Barber - Cincinnati Public Schools Facility Planning Office

Ed Berning - Planning Technician, Cincinnati City Planning Department

Pat Cox - Director, Oakley Senior Center

Debbie Sawyers - Property Manager, Rowe Stanley Towers

Tony Costello - Ball State Professor
Resident Public School Savior

Andy Seager - Ball State Professor
Temporary Thesis Instructor

Denise and Marty Hovey - Local Contacts, Inspiration and Emotional Support

Ball State University’s Masters of Science in Historic Preservation Class of 2001

Mr. Lerch - Art and Architecture History guru who got me interested in preservation

The past and present staff of Sands Montessori School, especially:
Rita Swegman
Sandra Sommer
Leah Dates
Julie Valin
Jan Smith
Annette Delaney
Ms. Kenton
Mrs. Vinegar
Mrs. Victor
Mrs. Barger
Georgie Ann Daub-Grosse
Wayne Slusher
Therlene King

Alison J. Hovey