City of Madison

Theresa Terrace Neighborhood Center

Pre-Design & Conceptual Design Report

January 2014

ISTHMUS
ARCHITECTURE, INC.

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Introduction

This Report has been completed to satisfy the objectives established by the City of Madison, Department of Planning & Community & Economic Development – Community Development Division, which are to work with the city and community to assess the potential of the existing property and prepare conceptual design documents to guide the development of a new neighborhood center on Theresa Terrace. Isthmus Architecture, Inc. was retained by the City of Madison to identify the programming needs, assess the long-term viability for building re-use and established the magnitude of associated costs associated with the proposed project.

Many individuals contributed to the preparation of this report. We greatly appreciated the continued involvement and guidance of the Theresa Terrace community residents and the city team members. Their vision has been instrumental in completing this study. City team members included:

City of Madison
Matthew Phair – Alder, District 20

Community Development Division
Jim O'Keefe
Mary Charnitz
Lorri Wendorf-Corrigan

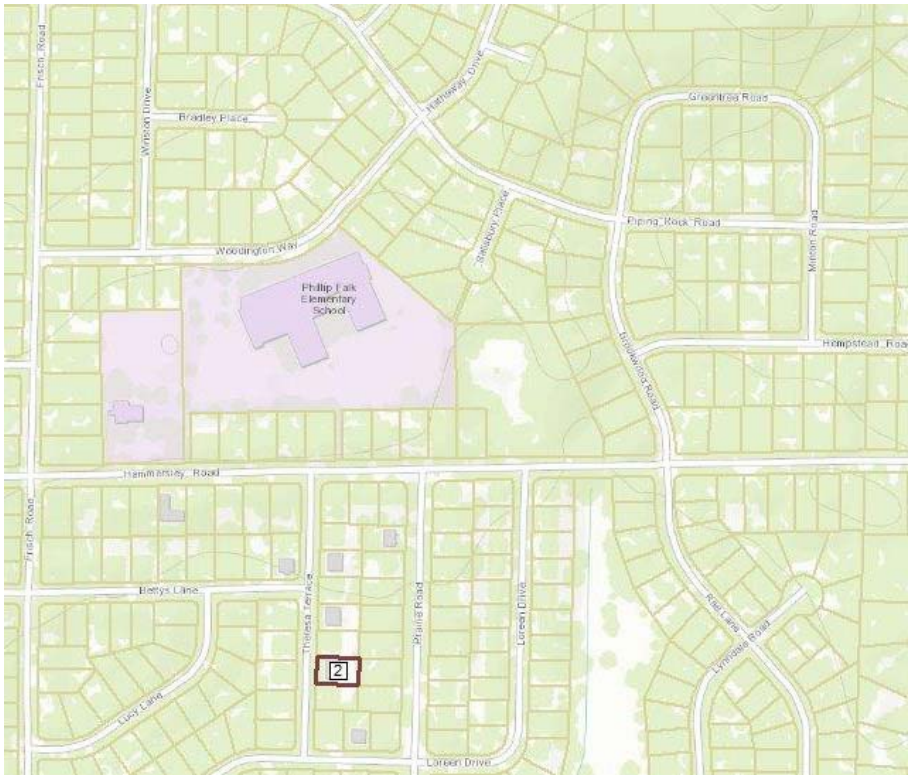
Dane County-Public Health Madison
Kimberly Neuschel

Peter Rött, AIA, NCARB
Architect, Principal
Isthmus Architecture, Inc.

Background

Need for this neighborhood project was identified by the city in 2012. When this property became available the city acquired it with the intention of locating the new neighborhood center on Theresa Terrace. The district alder and city staff held a series of community meetings to gather input. Adults and children in the neighborhood were interviewed to gather input and to articulate the needs and goals of the project. In June of 2013 city staff prepared a presentation which summarized the information, input and neighborhood consensus.

In August the city issued a request for proposals for architectural services and selected Isthmus Architecture of Madison as consultant for the Pre-design and Conceptual Design Project.



Proposed Site within Neighborhood

Program Development

Service Profile Program

The key function of the proposed center will be community building. The center will provide program, meeting and office space for enrichment programs within the immediate community. The center will focus on serving the needs of 8-14 year olds. It is envisioned that scheduled activities will be provided in response to the community's interest. The center will provide a safe-space for older youth. Alternately, adult and family oriented programs will be provided. The center will also function as a link to provide better access to activities and resources off-site.

It is envisioned that the center would be minimally staffed at the outset. Most likely operation of the center would begin with limited hours, week days and evenings.

Meetings with the community have identified the need for enrichment programs in the following areas:

tutoring youth recreation health and nutrition computer skills arts activities literacy family resources

Images of Wil-Mar Neighborhood Center

Space Program

The neighborhood center for Theresa Terrace requires basic flexible interior space that can easily accommodate a variety of uses and activities. The spaces may be grouped by use into three categories as follows:

Activity Area – Main Space
Open but easily divisible into two/four smaller areas, approximately 1080 SF

Support Space
Public toilet rooms, 2 @ 60 SF
Small kitchen, 50 SF
Director's office, 100 SF

Utility Space
Mechanical room, 120 SF
Janitor/maintenance closet, 50 SF
Building storage, 100 SF
Equipment storage, 120 SF

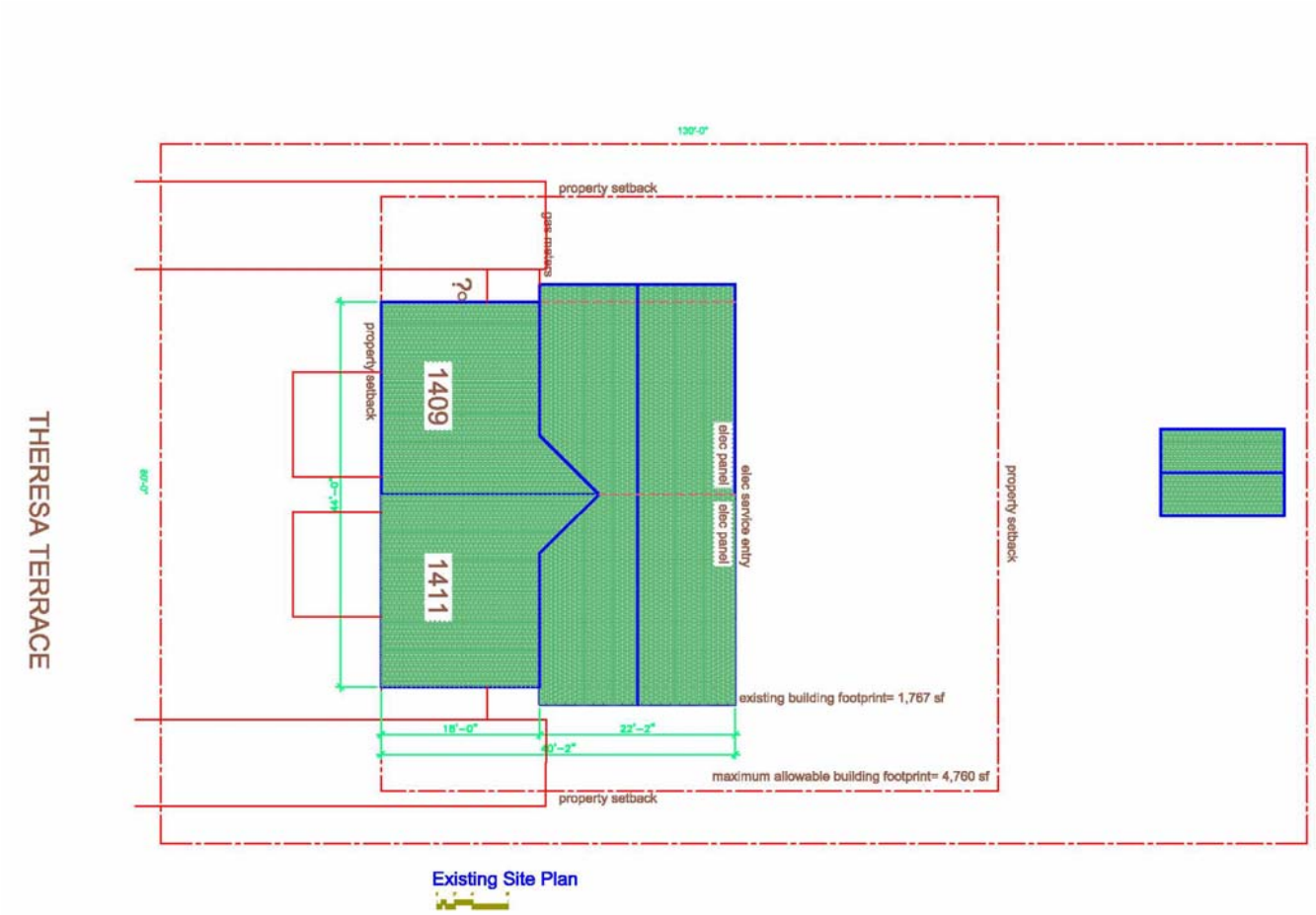
Space Needs Summary

This program could fit into the existing building footprint of 1,760 square feet. Ideally the layout of the neighborhood center should be on one floor with outside entrances at, or near grade. The main activity space should have a hard floor. Ancillary space that might result in plan development and refinement could be useful for food pantry storage and a coat closet.

Conceptual Site Development

Site Analysis

The property consists of flat lot, located mid-block, with a split-level residential duplex building of wood frame construction with a partial, half-exposed basement and a partial crawl space. At the rear of the property a storage shed of wood frame construction is located. Single width concrete driveways flank the building on each side yard. The duplex appears to be approximately 40 years old. Damage due to vandalism is evident on the building exterior.




North Elevation


West (Street) Elevation


South Elevation

Exterior Envelope

The building is clad in lapped (hardboard) siding except at lower portion of the split level portion which is sided with T-111 textured plywood siding. The roof gables are sided with hardboard. Windows are mostly original wood sliding units with single glazed with aluminum combination storms. These windows are in poor condition. The living room windows are vinyl replacements with insulated glazing are in fair condition. Patio doors are clad-type with insulated glazing and screen units, replacing original windows. The glass has been broken in these doors and requires replacement.

Entrance doors are newer metal-faced insulated units with storm/screen combination in good condition.

Roof is asphalt shingle, standard three-tab, of recent vintage.

Unit 1409 - Interior General View

Unit 1411- Interior Showing Level Change

Interior Finishes

Walls and ceilings are typically ½" gypsum board textured and painted.

Interior doors and frames are typically flush hollow core with Luan mahogany veneer and trim. Furnace closet doors are pine louver style. Some doors are off their hinges.

Flooring is generally wall-to-wall carpet. Flooring in kitchens is sheet vinyl. Flooring in baths is mosaic ceramic tile. Flooring in living areas is laminate type flooring, tongue and groove.

Frame and structure

Building is standard wood frame construction with builder-trussed roof. Floor sheathing is loose/spongy in upper level of south unit. A crawl space exists below living/dining/kitchen areas. The crawl space is assumed not to be insulated.

Building systems exist for two dwelling units. All systems, equipment and metering is duplicated. Each unit has a gas-fired domestic hot water heater, gas-fired forced air furnace and thru-wall window type air conditioners in living area. These units are not original but not new and may be near the end of useful life. Ductwork is configured for the residential use. Appliances existing in the building, kitchen and laundry, are of various age and condition.

Summary

Any reuse of this building will require that deferred maintenance work be completed at a minimum. This work would begin with the tightening of the exterior envelope. The scope of this work would include potentially replacing all window and patio door units and residing the exterior. Interior work would begin with the reconfiguring of the interior partitions and include the replacement and freshening-up of interior finishes.

For a new single use, conversion of the duplex dwelling configuration will require opening up the interior space. At a minimum it would entail the reframing or eliminating interior walls to create more open space.

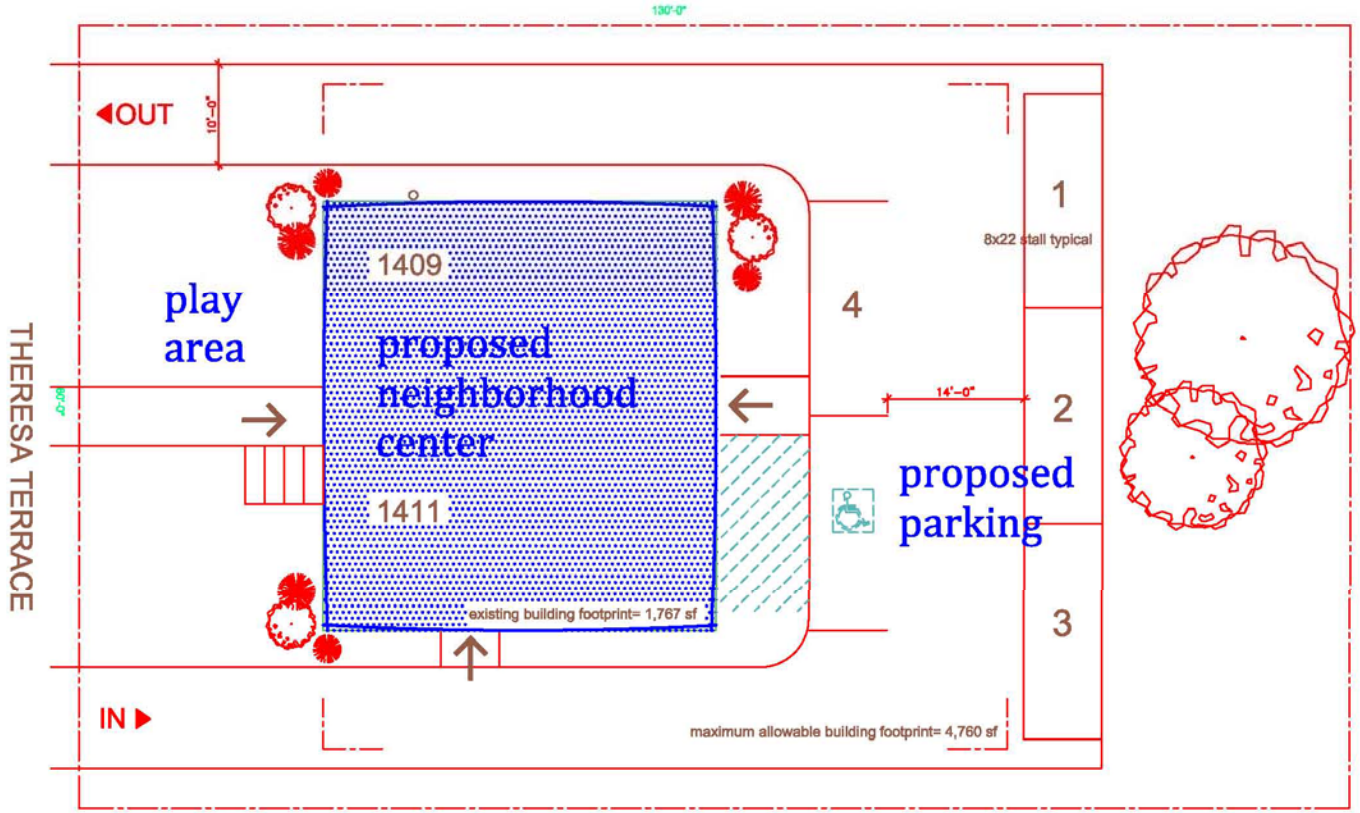
Challenges: Approximately half of the building area rests over a shallow crawl space. Wood frame floors over crawl space may not be compatible with high impact functions and group activities. The split level floor configuration is not universally accessible. The second floor is 52 inches above the ground floor. The basement is 48 inches below the ground floor.

Re-use or New: Three scenarios exist for this building with regard to meeting the program requirements for a proposed neighborhood center use: Renovation, Partial Replacement and Total replacement. The building foundation is in good condition and could be retained under any scenario. The two-story portion presents the greatest impediment to fully utilizing the existing building and reconfiguring this portion may prove to be cost prohibitive.

Conceptual Design

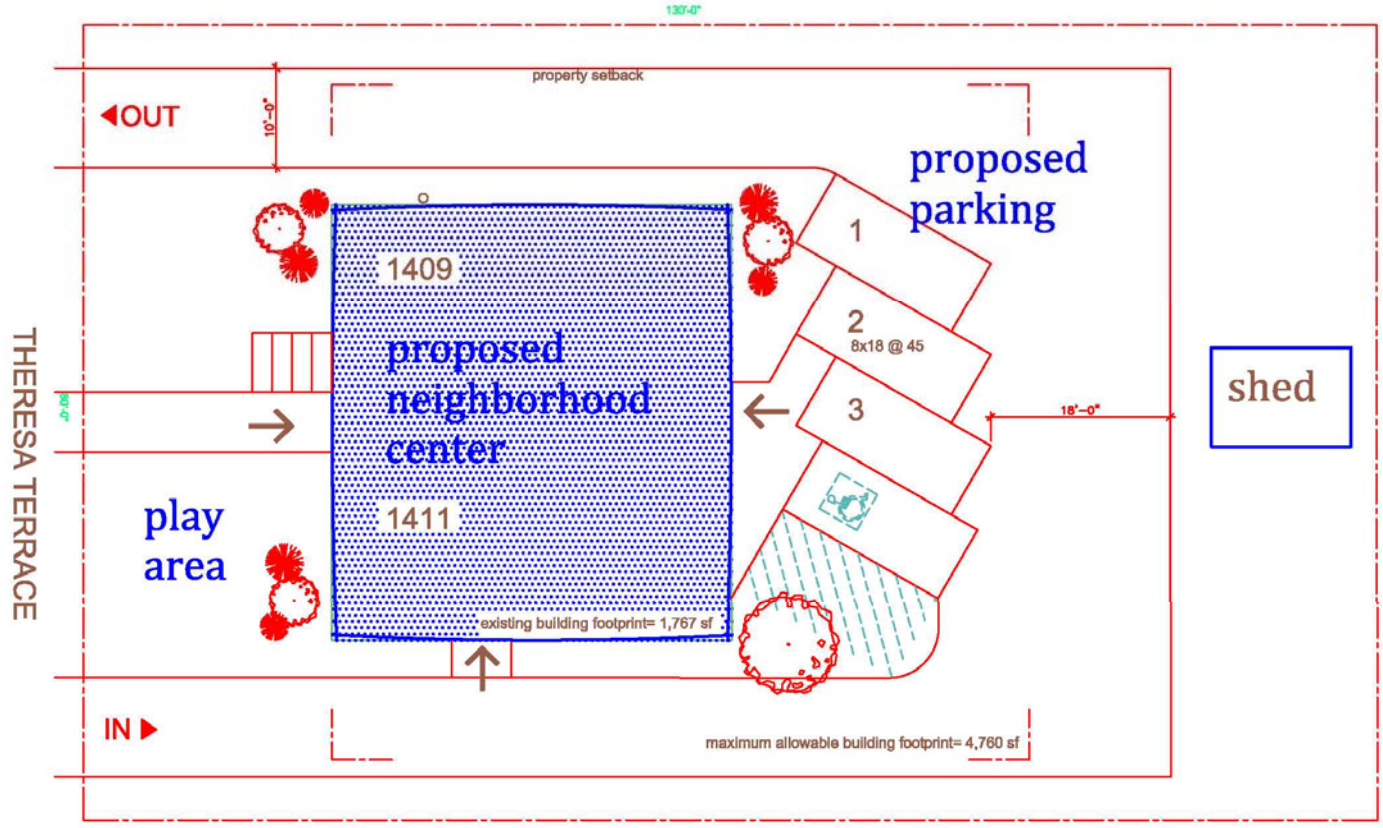
Site Plan Options

The property contains sufficient area to meet the potential needs of the program with a facility occupying the existing building footprint and utilizing a portion of the rear yard for parking. Following are two site plan drawings that are workable alternatives that meet the parking and zoning requirements.



Site Plan Option 1

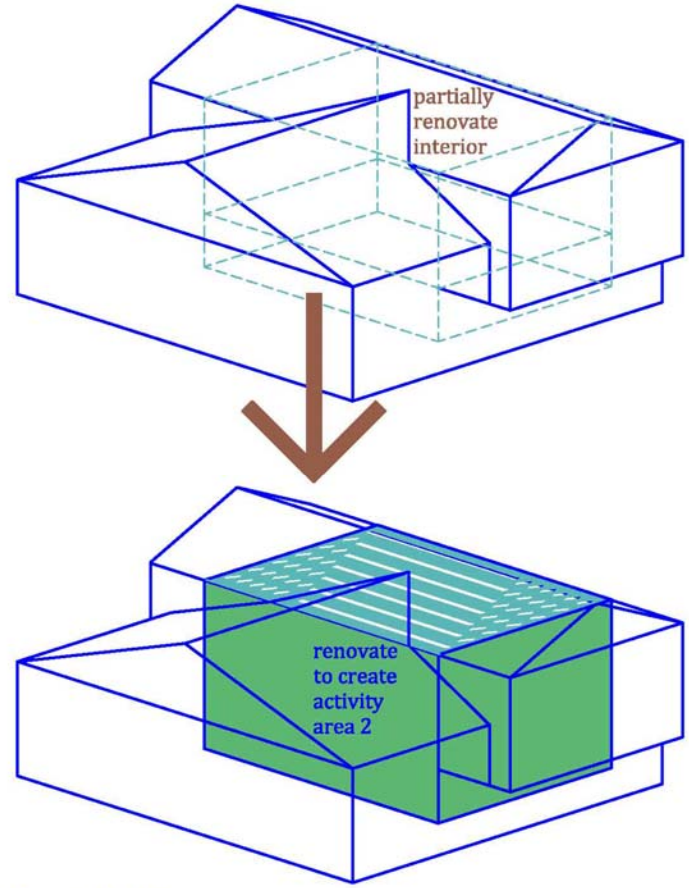
This property could support a neighborhood facility that could accommodate approximately 70 people. The building should be configured to provide as much interior space on a single level with an accessible entrance.



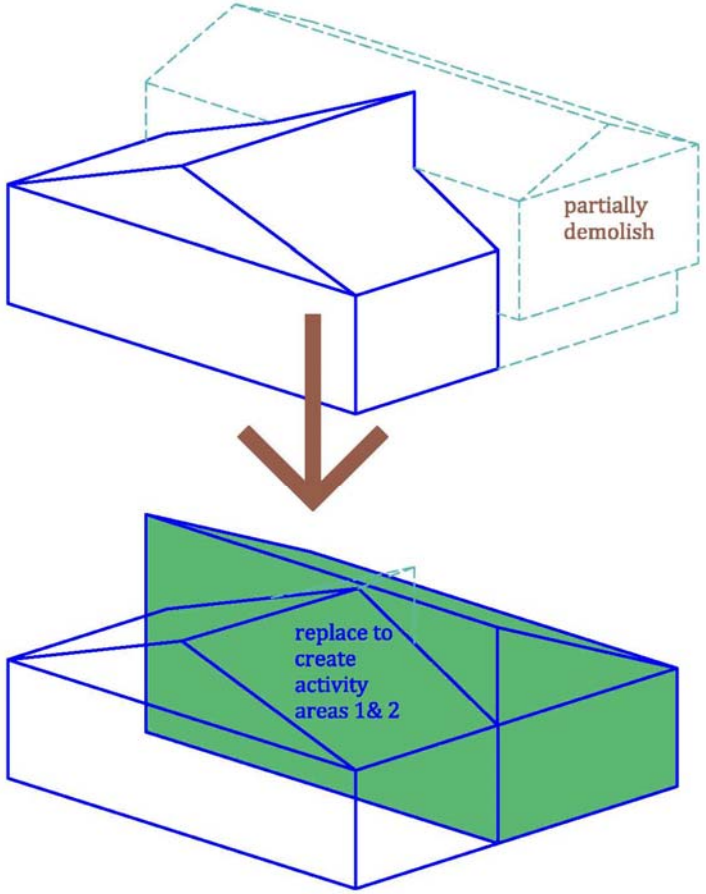
Site Plan Option 2

Building Options

Each building scenario is graphically depicted below to illustrate the complexity of the scope of work for each. The first scenario presents challenges to re-frame the two story structure to provide an open activity space. The second scenario offers the advantage of retaining the portion of the building that is already accessible.

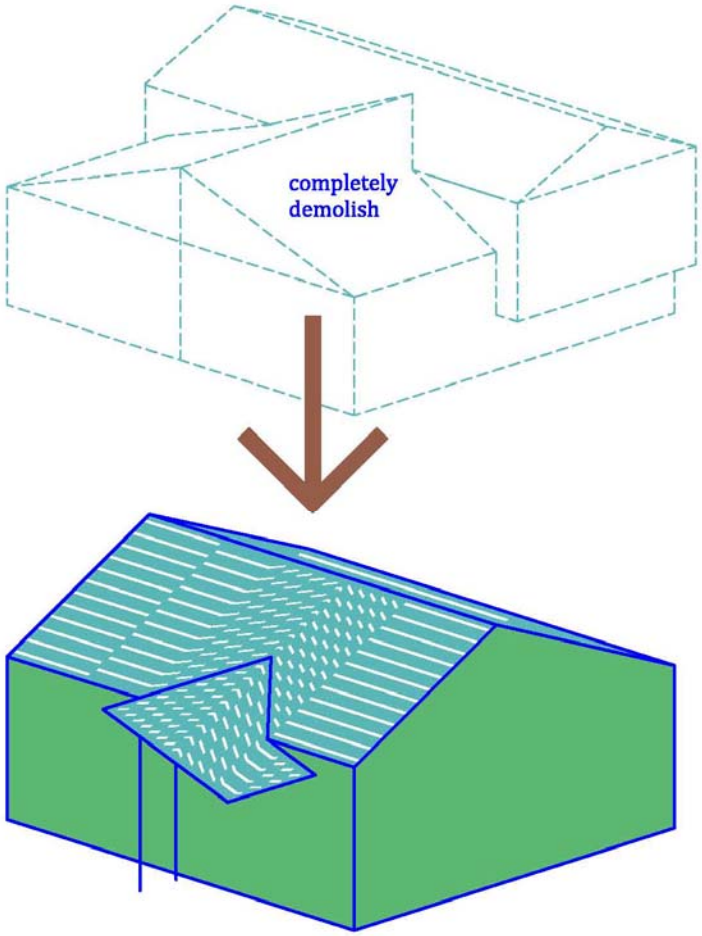


Renovation Option



Partial New Construction Option

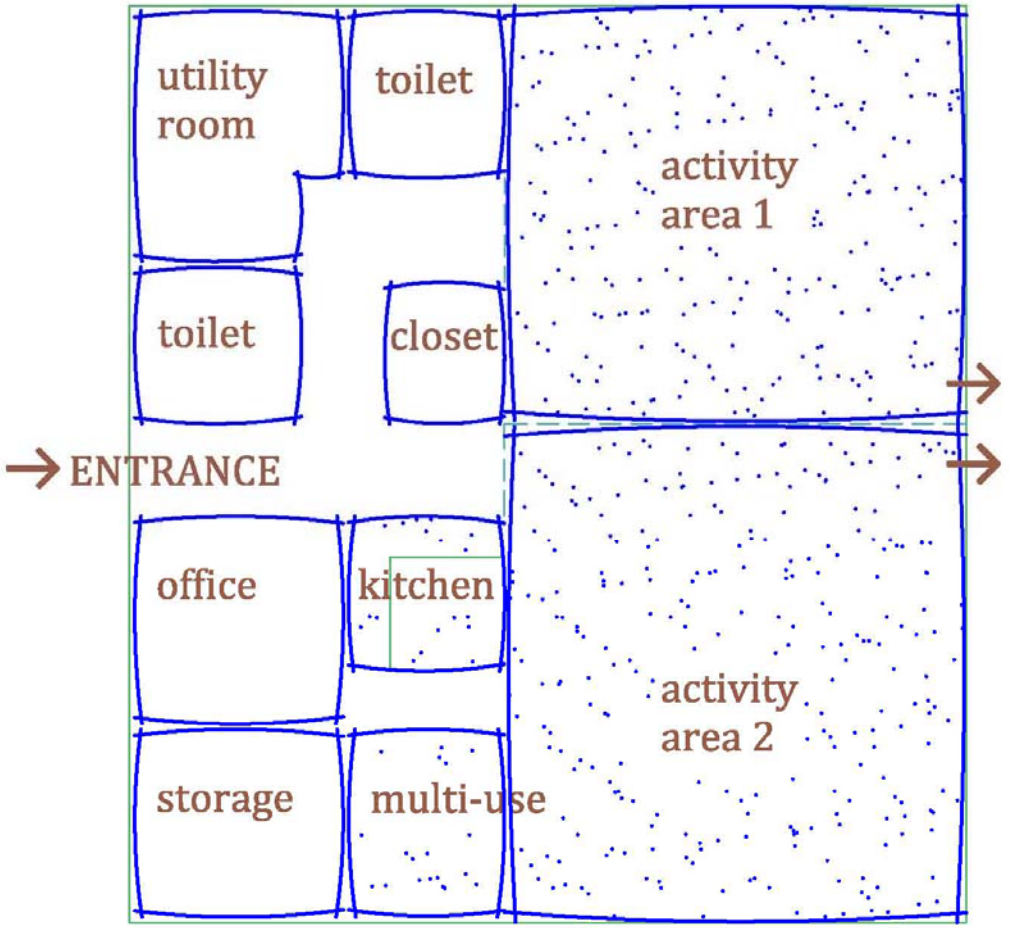
Replacing the existing building allows a new single-floor facility to be constructed on the existing foundation. A new building can potentially meet more of the program requirements within a thermally high-efficient envelope.



New Construction Option

Blocking Diagrams

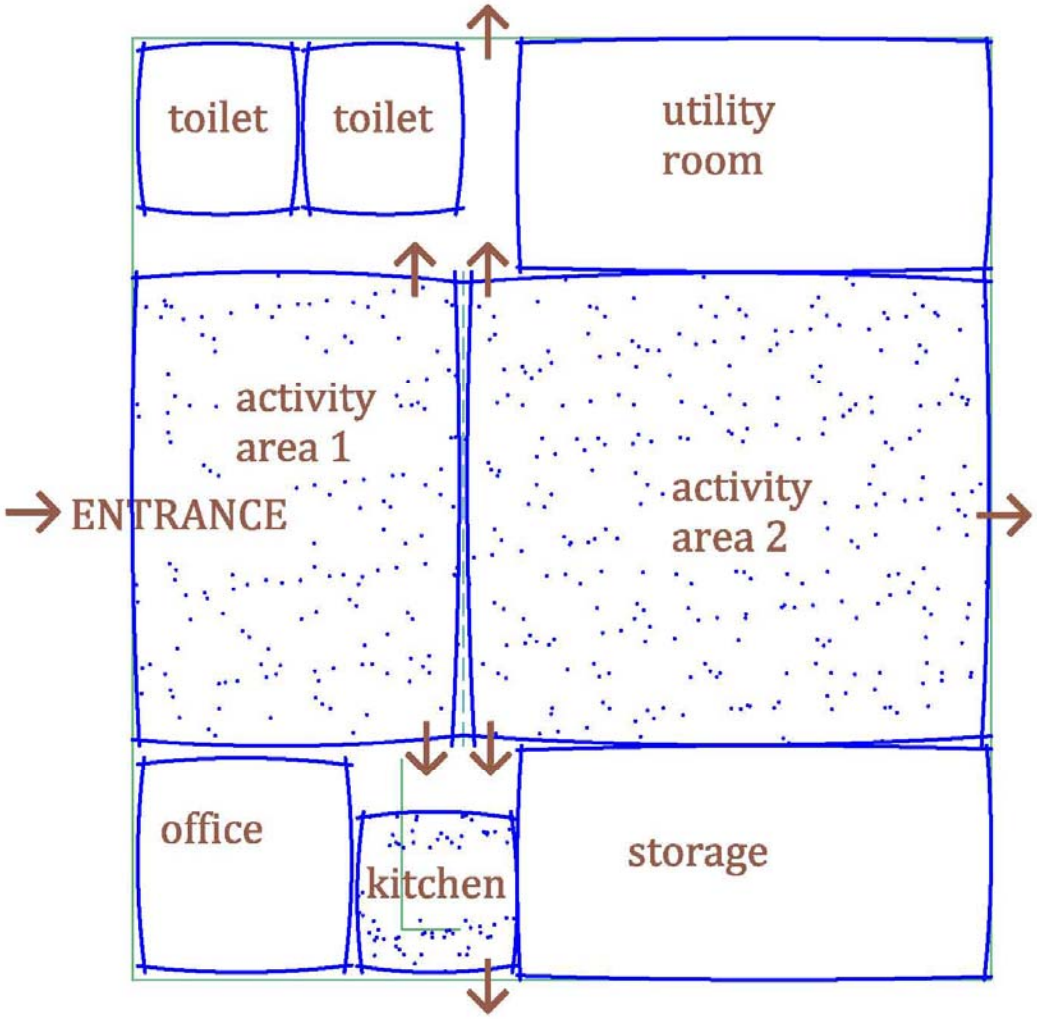
This blocking diagram could be used to renovate the existing building or to replace the building with new construction.



Blocking Diagram 1

City zoning criteria dictates that the building main entrance must face the street. The main activity area is placed at the rear of the building to permit the office to be placed near the entrance to provide reception to visitors and to monitor the daily operations. Support spaces are gathered toward the street. The main activity area is easily divisible and can be configured to provide ingress and egress to meet building code requirements. This diagram is sized to meet the program requirements and to fit onto the existing building footprint.

The following blocking diagram provides an alternate method to meet the program requirements. In this diagram the activity space is centered in the building footprint. This layout could be applied to renovate the existing building. Existing level changes will need to be studied further to optimize the potential reuse of the building.



Blocking Diagram 2

Building Code Analysis

Commercial Building Code Review

2009 International Building Code (IBC) as adopted by the State of Wisconsin

Proposed Building Area: 1,760 GSF / 1 story

303.1 Use and Group: A-3 (Assembly)

304.1 Use and Group: B (Business)

602.1 Construction Type: TBD – III or V

706.01 2 hour exterior bearing walls required for assembly

803.9 Interior wall and ceiling finish requirements/ non-sprinklered: corridors (class A), Rooms (Class C). Entry may not be less than Class B.

(F) 903.2.1.3 Fire Protection. Automatic sprinkler system is not required in A-3 occupancy because proposed building size is below minimum occupant threshold.

906.1 Portable fire extinguishers required.

907.1 Manual fire alarm is not required due to occupancy limit of 70 persons.

1004.1.1 Occupant Load, areas without fixed seating

Per table 1004 / Assembly, unconcentrated (chairs and tables) = 15 SF per occupant.

Therefore, 1064 SF/15 SF per person = 70persons.

1011.1 Internally illuminated exit signage is required.

1011.3 Tactile exit sign age is required.

1105.1 Accessible entrance is required. Universal accessibility is required inside facility.

2902.1 Plumbing: for A-3 use the following fixtures are required:

Water closet	1 per 25 males and 1 per 65 females
Lavatories	1 per each sex
Service Sink	1 per floor

Estimates of Probable Costs

Conceptual estimates of the potential cost to renovate or to build new are based upon preliminary data and a number of assumptions. These estimates are intended to be used as a guide to inform future discussion and planning efforts. Many factors beyond the scope of this report will affect the actual final scope of work and cost of construction.

Base Renovate Option

	HARD COSTS - Description		Totals
DIVISION 1	Permits / Fees	$	3,000
DIVISION 2	Dumpster	$	1,500
	Selective Removal - Partial Re-use	$	6,500
DIVISION 3	Not used	$	-
DIVISION 4	Not used	$	-
DIVISION 5	Handrails	$	500
DIVISION 6	Carpentry	$	5,000
DIVISION 7	Insulation	$	200
DIVISION 8	Exterior Doors (3)	$	6,000
	Interior Doors (3)	$	3,500
	Accordian Folding Partition	$	1,500
	Windows	$	30,000
DIVISION 9	Gypsum Board Patching	$	2,500
	Painting	$	12,500
	Carpet	$	3,200
	VCT Flooring	$	2,640
DIVISION 10	Sound system, lighting system, equipment	$	10,000
	Toilet accessories	$	400
DIVISION 11	Not Used		
DIVISION 12	Window Treatment	$	2,500
DIVISION 13	Entrance canopy & exterior signage	$	2,000
DIVISION 14	Interior Lift	$	15,000
DIVISION 22-28	Life Safety Egress Lighting & Security	$	8,000
	Plumbing: remodel kitchen, build one toilet	$	10,000
	HVAC System modifications	$	12,000
	Electrical modifications	$	16,000
DIVISION 32	Driveway only	$	15,000
	Landscaping - basic	$	5,000
	Play equipment	$	10,000
	Hard Costs Total	$	184,440
	Contingency (20%)	$	36,588
	SOFT COSTS - Description		
	A/E fees	$	30,000
	Furnishings Allowance	$	16,000
	TOTAL ESTIMATED COST	$	267,028

Cost per square foot: $105 ($185328/1760SF)
Estimated construction time: 120-160 days

Partial Renovate Option

	HARD COSTS - Description		Totals
DIVISION 1	Permits / Fees	$	3,000
DIVISION 2	Dumpster	$	14,000
	Selective Removal - Partial Re-use	$	11,500
DIVISION 3	Concrete	$	4,000
DIVISION 4	Masonry	$	3,000
DIVISION 5	Handrails	$	7,000
	Structural Steel	$	10,000
DIVISION 6	Finish carpentry	$	12,000
	Rough Carpentry	$	25,000
DIVISION 7	Insulation	$	12,000
	Roofing	$	19,000
DIVISION 8	Exterior Doors	$	7,000
	Interior Doors	$	9,000
	Accordian Folding Partition	$	10,000
	Windows	$	30,000
	Skylight	$	5,000
DIVISION 9	Gypsum Board Partitions	$	12,000
	Painting	$	25,000
	Carpet	$	5,800
	VCT Flooring	$	2,640
DIVISION 10	Sound system, lighting system, equipment	$	10,000
	Toilet accessories	$	1,200
	Metal lockers	$	5,000
DIVISION 11	Not Used		
DIVISION 12	Window Treatment	$	2,500
DIVISION 13	Entrance canopy & exterior signage	$	16,000
DIVISION 14	Interior Lift	$	15,000
DIVISION 22-28	Life Safety Egress Lighting & Security	$	8,000
	Plumbing	$	25,300
	HVAC System	$	48,000
	Electrical	$	34,000
DIVISION 32	Driveway & Parking	$	30,000
	Landscaping	$	30,000
	Play equipment	$	10,000
	Hard Costs Total	$	461,940
	Contingency (20%)	$	92,388
	SOFT COSTS - Description		
	A/E fees	$	66,500
	Furnishings Allowance	$	16,000
	TOTAL ESTIMATED COST	$	636,828

New Shell Building Option

	HARD COSTS - Description		Totals
DIVISION 1	Permits / Fees	$	3,000
DIVISION 2	Dumpster	$	14,000
	Demolish Existing Building	$	15,000
DIVISION 3	Concrete	$	16,000
DIVISION 4	Not used	$	-
DIVISION 5	Not Used	$	-
DIVISION 6	Finish carpentry	$	12,000
DIVISION 7	Not Used	$	-
DIVISION 8	Exterior Doors	$	7,000
	Interior Doors	$	4,500
	Accordian Folding Partition	$	10,000
	Windows	$	13,000
DIVISION 9	Gypsum Board Partitions	$	12,000
	Painting	$	25,000
	Carpet	$	4,800
	VCT Flooring	$	2,640
DIVISION 10	Sound system, lighting system, equipment	$	10,000
	Toilet accessories	$	1,200
	Metal lockers	$	5,000
DIVISION 11	Not Used		
DIVISION 12	Window Treatment	$	2,500
DIVISION 13	Prefabricated Metal Building Shell	$	65,000
	Entrance canopy & exterior signage	$	18,000
DIVISION 14	Not used		
DIVISION 22-28	Life Safety Egress Lighting & Security	$	8,000
	Plumbing	$	22,000
	HVAC System	$	48,000
	Electrical	$	34,000
DIVISION 32	Driveway & Parking	$	30,000
	Landscaping	$	30,000
	Play equipment	$	10,000
	Hard Costs Total	$	422,640
	Contingency (15%)	$	63,396
	SOFT COSTS - Description		
	A/E fees	$	58,400
	Furnishings Allowance	$	16,000
	TOTAL ESTIMATED COST	$	560,436

Cost per square foot: $230 ($405536/1760SF)
Estimated construction time: 200-240 days

New Building Option

	HARD COSTS - Description		Totals
DIVISION 1	Permits / Fees	$	3,000
DIVISION 2	Dumpster	$	14,000
	Demolish Existing Building	$	15,000
DIVISION 3	Concrete	$	16,000
DIVISION 4	Brick Masonry	$	12,600
DIVISION 5	Handrails	$	7,000
DIVISION 6	Finish carpentry	$	12,000
	Rough Carpentry	$	20,000
DIVISION 7	Insulation	$	12,000
	Roofing	$	28,800
DIVISION 8	Exterior Doors	$	7,000
	Interior Doors	$	4,500
	Accordian Folding Partition	$	10,000
	Windows	$	13,000
	Skylight	$	5,000
DIVISION 9	Gypsum Board Partitions	$	12,000
	Painting	$	25,000
	Carpet	$	4,800
	VCT Flooring	$	2,640
DIVISION 10	Sound system, lighting system, equipment	$	10,000
	Toilet accessories	$	1,200
	Metal lockers	$	5,000
DIVISION 11	Not Used		
DIVISION 12	Window Treatment	$	2,500
DIVISION 13	Entrance canopy & exterior signage	$	18,000
DIVISION 14	Not used		
DIVISION 22-28	Life Safety Egress Lighting & Security	$	8,000
	Plumbing	$	22,000
	HVAC System	$	48,000
	Electrical	$	34,000
DIVISION 32	Driveway & Parking	$	30,000
	Landscaping	$	30,000
	Play equipment	$	10,000
	Hard Costs Total	$	443,040
	Contingency (15%)	$	66,456
	SOFT COSTS - Description		
	A/E fees	$	62,000
	Furnishings Allowance	$	16,000
	TOTAL ESTIMATED COST	$	587,496

Conclusion

Based upon the conceptual estimates, replacing the existing building will likely be the most economical option. A new building will optimize the use and the city's investment. New construction will result in interior space and layout specifically tailored to meet the needs of the program whereas renovation will meet most of the needs of the program.