

Waterloo Art Center

Design Connect



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Report

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About Design Connect

Design Connect is a multidisciplinary student-run community design organization at Cornell University. Design Connect is rooted in collaborative, democratic, and sustainable principles for the advancement of communities in Upstate NY. Every semester, the organization provides design and planning services to organizations and municipalities in Upstate NY, as well as practical, experiential learning opportunities for students.

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0.0 Executive Summary

The Design Connect team from Cornell University was tasked by the Village of Waterloo to design a concept for 38 Washington Street. The stakeholders envisioned this redevelopment project to showcase local artists and cultivate a destination for regional artists to come and share space and ideas, drawing people from all over the Finger Lakes to come to visit. The report outlines the steps taken by the Design Connect team, starting with research and analysis, then community engagement, and eventually schematic design.

The Design Connect team approached the project first through research and analysis. The team identified opportunities to draw visitors from neighboring communities and the Erie Canal via water taxi, another ongoing Waterloo revitalization project. Issues and challenges about the current building structure were also identified and documented to allow the team to have a better understanding of the building and its design restrictions and priorities.

Prior to the design phase, community outreach was conducted to better understand and inform the design concept. Community voice was collected via virtual focus group interviews and distribution of questionnaires to community members. A pool of questions was generated first, then each question was assigned to the appropriate method and audience.

The conceptual redesign of the building was motivated by insights found during community engagement. Fulfilling the Village's initial request, the proposed redesign of the three-story building includes a ground floor exhibition event space, two artist residencies, and many flexible studios. A key element of the proposal is the atrium, a void carved from the street-facing end of the building to unite both the programming and facade motivations of the redesign. The Design Connect team produced a set of floor plans, sections, and renderings to convey the design concept.

1.0 Introduction

1.1 Vision

The Village of Waterloo proposes to redevelop 38 Washington Street into the Waterloo Art Center. The space, currently vacant besides the ground floor which is occupied by a family business, will become an arts and cultural destination for local and regional creatives. The Waterloo Art Center is intended to be mixed-use and will offer gallery, work, event and living space. This redevelopment project is a part of the Village's larger downtown revitalization initiative to diversify economic activity and create a sense of place that elicits Waterloo's rich historical past. The Village and its partners envision that the Waterloo Art Center will host several annual exhibits and attract people from all over the Finger Lakes to come and visit Waterloo. Waterloo's holistic view of revitalization includes a range of uses including local food, beverage, recreation, housing, and arts and culture. By infusing these elements with a sustainable, inclusive design, Waterloo can plan for the economic potential of today and the coming decades.

1.2 Building History

The building stands as a testament to the longevity of Waterloo's existence on the Canal. The historic property was once a piano factory, known as the Waterloo Organ Company. The company was well known in the 1890's for their creation of the Malcolm Love Piano, a beautiful instrument that won an award for its fine quality of tone and workmanship at the World's Columbian Exposition in Chicago in 1893. In 1897, when the original Waterloo Organ Company burned, the Organ Company built the current building on Washington Street. Prior to the Waterloo Organ Company, the site was also home to the Waterloo Yeast Company which manufactured for Twin Brothers' Yeast. Most recently, the building was home to Moore's Furniture store.

2.0 Research and Analysis

2.1 Precedent Analysis

Waterloo is a historical village along the Erie Canal. The population was 7,642 according to the 2010 census. In the village, the population is spread out, with 23.5% under the age of 20, 5.7% between 20 and 24, 23.1% between 25 and 44, 29.5% between 45 and 64, and 18.2% who were 65 years of age or older. The median age is 43.3 years. There exist a few museums with content mostly about the history of Waterloo. An example is the Terwilliger Museum which illustrates the history of Waterloo from its earliest Native American residents at Skoi Yase. Another example is the National Memorial Day Museum which displays an exhibit of historic images, poetry and prose that were created throughout the 19th century to commemorate Memorial Day. There are also some notable art galleries in the surrounding areas. The Cracker Factory in Geneva is a renovated industrial factory with multifunctional facilities such as wedding and art shows, concerts and events. Another popular art space is the Cayuga Arts Collective in Trumansburg, NY with an overall mission to build a community that fosters creativity in the visual arts by offering local artists a platform to show their works. In Penn Yan, NY, the Arts Center of Yates County is a nonprofit community art center whose mission is to enrich the lives of Yates County residents, artists and visitors by providing opportunities to actively participate in the arts through diverse workshops and pottery studios. Inspired by these precedents and given that Waterloo is a community-based village, a multifunctional art center is suitable for the concept of the space.

2.2 Site Analysis

Waterloo is located between the northern-most tips of Seneca and Cayuga Lakes in the heart of the Finger Lakes area, just five miles south of New York State Thruway exit 41. The downtown area is located at the intersection of Routes 5&20 and Route 96. Waterloo is centrally located between Rochester, Syracuse, and Ithaca, where all three cities can be reached by car in less than one hour. Waterloo is also located between Geneva and Seneca Falls. Incorporating a compelling landscape design with a bike path could enhance these communities' connectivity. The site's location along the Canal and near Route 20 benefits the village as a magnet to draw in visitors. Travelers who transverse between Geneva and Seneca Falls are likely to become frequent visitors to the Art Center, boosting tourism in Waterloo.

Distance between Waterloo and nearby major cities:

Albany – 180 miles; Buffalo – 108 miles; Ithaca – 42 miles; New York City – 280 miles; Rochester – 48 miles; Syracuse – 45 miles.

The Waterloo Art Center is near the Cayuga-Seneca Canal, which connects Lake Cayuga and Lake Seneca's tops. It is approximately 20 miles long. The Cayuga-Seneca Canal always has been an economic engine for the communities of Waterloo and Seneca Falls, where public boat launch "Oak Island" is nearby to the west, and there is a trail between Oak Island and downtown to the west. As of October 2018, the state of New York began The Reimagine the Canal Initiative, which aims to revitalize and enhance economic development and recreation along the Canal's corridor. With the site located along the Canal, the proposed building can benefit from potential funding from the state of New York as the project can create new uses for the Canal and improve the quality of life for New Yorkers.

The building is positioned to the west of Washington Street, between a car repair shop and a tax office. The building is longest along the East-West axis, giving it adequate southern sunlight. The nearby car repair shop uses the plot of land behind the building. It would be of benefit to propose the donation of an easement to the Art Center. This allows for more landscaping of the site as a public trail integrated into the Seneca Cayuga Bridge.

2.3 Building Analysis

The primary issues for the building concerning safety and function include the current status of the fenestration and the exterior facing of the building. There is a high potential for water damage (as seen in the second floor), and the likelihood of inefficient heat gain and loss is extremely high (address more strategic implementations of insulation and fenestration systems). Aesthetically, the highest return will be with the refinishing of surfaces (walls and floors) and the increase of interior daylighting systems; there is moderate potential for material reuse/maintenance. The most expensive operations will most likely be with increasing the energy efficiency of the buildings. Please refer to the building analysis matrix below for detailed documentation of digital survey findings.

Note: All findings should be Verified in Field (VIF) when public health concerns and the state finds appropriate.

Location	Item	Status	Description
Floor 1	Entrances	75% Operable	4 entrances on the first floor - 2 interior-exterior north-facing entrances; 1 interior-exterior south-facing entrance; 1 interior-exterior south-facing entrance that has been sealed with plastic
Floor 1	Glazing	100% Operable	8 east-facing windows; eastern facade is entirely glazed (aligns with front platform)
Floor 1	Glazing	~50% Operable	7 south-facing windows; 2 south-facing windows have been removed and infilled with insulation; 2 south-facing windows have been infilled and embedded into the wood-clad wall; 3 operable windows

Floor 1	Glazing	Inoperable	6 west-facing windows; 3 west-facing windows have been removed and infilled with insulation; 3 west-facing windows have been removed and boarded up (2 cladded over)
Floor 1	Glazing	55%-66% Operable	9 north-facing windows; 3 north-facing windows have been infilled and embedded into the wood-clad wall; 4 remain operable; 2 remain unknown
Floor 1	Elevator	Inoperable	Interior access door blocked and elevator inoperable; exterior door in line with elevator (exterior elevator access or closet/storage space (potential for a straight-through elevator to transport art up and down))
Floor 1	Flooring	100% Operable	Front elevated platform carpeted (heavily stained); Northern access door to stairs - linoleum flooring (yellow); remaining - exposed concrete slab (substantial amount of cracking)
Floor 1	Columns	100% Operable	7 exposed columns; 3 have been wood-cladded
Floor 1	Walls	100% Operable	3 different types of cladding - rear portion is exposed (no cladding)
Floor 1	Stairway	100% Operable	Originally open stairway has been enclosed with MDF and insulation (unfinished, door access required)
Floor 1	Ceiling	100% Operable	Drop ceiling covering entire first floor (assumed vinyl or expanded polystyrene)
Floor 1	Lighting	100% Operable	17 Rectangular Flush Mount lights
Floor 1 - Floor 2	Stairway	100% Operable	Treads lined with red carpet; exposed insulation lining walls (resembles carpet padding); landing at second floor is an extension of tread carpeting
Floor 2	Glazing	100% Operable	6 east-facing windows
Floor 2	Glazing	75% Operable	8 south-facing windows; 2 have been boarded up;(read east to west) moderate water damage at first window (this window opens inwards from the right with a sill lining the bottom)
Floor 2	Glazing	20% Operable	5 west-facing windows; 4 have been boarded up; 1 (lower elevation) has been infilled with insulation and plastic wrapped
Floor 2	Glazing	43% Operable	7 north-facing windows; 4 have been boarded up; (read east to west) moderate water damage at first window (this window opens inwards from the right with a sill lining the bottom)
Floor 2	Elevator	Inoperable	Access is restricted; painted wood paneling
Floor 2	Flooring	100% Operable	Hardwood flooring throughout, minimal damage (few stains); break at the exposed column grid line from the stairway to the western edge
Floor 2	Columns	100% Operable	7 exposed columns; all have been wood-cladded
Floor 2	Walls	100% Operable	All walls have been clad in the same material; water damage under specified windows (see glazing)

Floor 2	Stairway	100% Operable	stairway has been clad with wood panels and painted; interior remains as assumed original
Floor 2	Ceiling	80% Operable	Gypsum board drop ceiling; flush with window frames; substantial water damage between the eastern edge and the center (particularly near the elevator shaft and stairway), as well as towards the southern edge
Floor 2	Lighting	100% Operable	Fluorescent tube lighting; 1 strip running from east to west, continuous; 2 strips running from east to west (break at elevator shaft and stairway)
Floor 2 - Floor 3	Stairway	100% Operable	Treads remain uncovered; handrail on the left side; interior walls remain exposed; entirely wooden
Floor 3	Glazing	100% Operable	6 east-facing windows
Floor 3	Glazing	100% Operable	8 south-facing windows
Floor 3	Glazing	85% Operable	6 west-facing windows; 1 has been boarded up
Floor 3	Glazing	100% Operable	8 north-facing windows
Floor 3	Elevator	Inoperable (Potential safety hazard)	Elevator shaft remains open (steel gate blocking interference); partial wall and "entrance" as eastern side of the elevator shaft
Floor 3	Flooring	100% Operable	Hardwood flooring throughout; minimal damage near elevator shaft and stairway
Floor 3	Columns	100% Operable	7 exposed wooden columns; 2 reinforcing H-columns surrounding the second column (reading east to west)
Floor 3	Walls	100% Operable	Walls remain entirely exposed and uninsulated; any potential damage is hard to read; protruding boards at several locations along the southern facing wall (closer to the western edge)
Floor 3	Stairway	100% Operable	staircase providing roof access through small enclosed rooftop penthouse; wooden railings that do not extend to the flooring; exposed wood treads; remains open
Floor 3	Ceiling	100% Operable	Exposed wooden beams and cross bracing; suspended drop platform towards the eastern edge
Floor 3	Lighting	100% Operable	5 singular light bulbs and 2 fluorescent tube fixture
Roof Penthouse	Entrances	Unknown	1 interior-exterior entrance on the southern wall
Roof Penthouse	Glazing	Unknown	3 known windows (2 north-facing, 1 east-facing)
Roof Penthouse	Elevator	Inoperable	Elevator pulley termination and gears remain inoperable and intact within the rooftop penthouse
Roof Penthouse	Stairway	100% Operable	Stairway termination and access to the rooftop
Eastern Facade	Awning	100% Operable	(assumed asphalt single) awning protrusion expanding from the northern to southern edges (wraps around the southern entrance and the northern entrance to large exterior access door as well)
Eastern Facade	Exterior facing	100% Operable	deterioration of wooden planks and peeling back of paint; bottom sill of majority of windows have deteriorated (high potential for water damage on the interior of the building);

			can read a slight grade from southern "high" point to northern edge
Eastern Facade	Parapet	100% Operable	Parapet extension on eastern facade - does not extend around the building
Southern Facade	Awning	100% Operable	Extension from store-front to the top of the southern entrance door; additional structural reinforcement by column
Southern Facade	Exterior facing	100% Operable	deterioration of wooden planks and peeling back of paint; bottom sill of majority of windows have deteriorated (high potential for water damage on the interior of the building); high density of ivy growth toward the eastern edge extending from the ground to the second floor
Southern Facade	Eave	100% Operable	Eave wrapping around the southern edge
Western Facade	Exterior facing	100% Operable	2 main feed pipes from the roof to the first and second floors exposed; deterioration of wooden planks and peeling of paint; bottom sills of majority of windows have deteriorated (high potential for water damage on the interior of the building); all windows have been boarded and finished from the exterior
Western Facade	Eave	100% Operable	Eave wrapping around the western edge
Northern Facade	Awning	100% Operable	Extension from store-front to the second access door; additional platform from the sidewalk to the second entrance
Northern Facade	Exterior facing	100% Operable	deterioration of wooden planks and peeling back of paint; bottom sill of majority of windows have deteriorated (high potential for water damage on the interior of the building); enclosed windows remain visible on the exterior; "Moore's" signage remaining
Northern Facade	Eave	100% Operable	Northern facing eave meets eastern parapet height; eave sits on top of parapet height (~50% of eastern facade)
Roof	Roof	100% Operable	Roof is sloped from the northern high point to the southern edge

3.0 Community Engagement

3.1 Methodology

Prior to design development, community outreach was conducted to better understand and inform the design concept. The Design Connect team first came up with a set of questions that needed to be addressed. The questions asked fell under four overarching categories: identity, vision, program, and concerns. For example, statements like *“how would you like to see the community evolve, and what role would you like the Arts center to play in that?”* and *“Are there any other programs / activities that the community would benefit from/ like to see in this project?”* were raised. After the pool of questions was generated, each question was then assigned to the appropriate audience and method, via either virtual focus group interviews or distribution of questionnaires to community members. Insights were analyzed and considered on the basis of desired use and connection to the surrounding environment. Moreover, suggestions on design features to consider were collected.

3.1.1 Focus Group Interview

A focus group of local artists were invited to join a discussion on October 7th regarding visions for the prospective Art Center. Given the context of the coronavirus pandemic, inquiries were presented in a virtual community engagement meeting through discussion and simultaneously, an interactive simulation. The simulation was facilitated through Google Jamboard, an interactive online whiteboard where individuals were invited to place answers to questions discussed. Two of our team members monitored the session and also took note of topics presented in the conversation.

3.1.2 Video Presentation + Questionnaire

An informative video presentation served to create awareness and encourage participation in a questionnaire targeting community opinion. This video, just under two minutes, highlighted potential contributions individuals could make in the development of this communal space. Emphasis was placed on the value of participant perspective. The questionnaire was distributed to prospective users of the arts center, local artists and community members, via an online survey link in efforts to better formulate concept goals. Questions targeted proposed use preferences, preferred art practices, and preferred classes.

3.2 Findings

Findings from community engagement provided the contextual insights needed to inform future design proposals. Following the focus group interview, the following points were brought to attention: First, members highlighted the importance of Waterloo being an agriculture community and hoped the Art Center would embody this identifying aspect. Targeting visitors besides local artists

was also suggested. Members also raised the need to consider management and maintenance requirements to ensure the longevity of the Art Center. Additionally, a need for flexible space was identified, in efforts to consider the needs of different arts. Lastly, an outdoor sculpture garden with seating and foot paths were recommended to emphasize a desired connection to the surrounding environment.

Descriptive statistics analysis on questionnaire responses provided the following insights. Thirteen people completed this survey. Most notably, 80% of respondents preferred art classes as the potential use. Painting classes were most preferred, desired by about 89% of participants. 79% of respondents felt pottery or ceramic classes would be ideal. Additionally, 60% valued gallery space and 50% have actually purchased art from local venues. A strong emphasis in regard to the surrounding environment was confirmed with 60% reporting visiting the lake front three or more times a month. Moreover, preferences on use and emphasis on respect to surrounding context amounted from the community engagement enacted. These aspects were considered during the schematic design phase.

4.0 Design Proposal

4.1 Concept

The conceptual redesign of the building was motivated by three primary considerations: the negotiation of program and privacy, the performative qualities of the facade, and broader site responses. These elements were identified for the unique opportunities they presented in reactivating the building's engagement with its surrounding public spaces and, more broadly, in contributing to Waterloo's social and cultural fabric.

The redesign proposes a multi-use center, incorporating a variety of programs. To address the specific privacy and spatial demands of these overlapping uses, more private and intimately scaled spaces were pushed deeper into the building and to the upper floors. This creates a gradient of spaces, contrasting the privacy of the artists' residences at the rear of the third floor with the publicity of the more animated open studios, theatre, and exhibition space on the first floor and along the facade.

Notably, this also taps into the expressive frontality of the building's street-facing facade. The facade is an integral aspect of the building's urban character and enables an expression of the revitalization of the structure. By locating the most dynamic programs along the facade, the adaptive reuse of the building is presented to the street, with generous window openings along the street-front surface providing glimpses into the building's activity to passersby, inviting greater community engagement. This performative function of the facade was further developed into a second scheme that introduces an atrium at the front of the building.

Finally, site-specific concerns were explored in the potential for an open-air sculpture garden and exterior performance spaces, or in the possibility for more park-oriented landscaping moves to integrate the Art Center along the Canal's walking circuit. These opportunities allow the scope of the project to extend beyond the enclosure of the building itself and begin to accommodate more diverse modes of sharing its spaces.

4.2 Schematic Design

4.2.1 Material Palette

A localized approach toward material helped define material selections. The proposed material palette attempts to incorporate features inspired by the agricultural culture in the Village of Waterloo. This particular style appreciates functionality and clean warmth. The art center concept seeks to provide a sense of comfort. Locally sourced materials such as oak, along with white and neutral paint selections, and dark finishes create a sense of familiarity and balance, ultimately satisfying comfort.

4.2.2 Programming

Following the project's concept, this proposal strategically organizes interior spaces in order to maximize space utilization and promote interaction within the different programs allocated throughout the building. All of the included programs were informed by the various community engagement activities that were held, particularly by the online survey, and showcase the different interests and potentials that currently exist in Waterloo.

The ground floor houses the proposal's primary programs and promotes an increased potential for foot traffic by maintaining an entirely glazed front facade and establishing minimal partitions throughout the floor. Glazing and daylighting conditions were fully kept in their existing condition, utilizing this arrangement to place open, public areas such as the reception and a bookshop towards the front and create a public gallery and a black box theater in the back, where windows have been previously covered or removed. An administrative office, to be also utilized as a small conference room, is also located on the ground floor for ease of access and flexibility.

The building's second floor hosts the greatest expanse of open studio spaces, providing opportunities for cross-disciplinary collaborative work efforts as well as larger scale classes and community engagement. The large open studio takes up a majority of the square footage for artists that would like to rent a single desk workspace. Located along the southern edge of the floor, this space is sure to provide excellent natural daylighting, as well as options to share work with other fellow artists. Additionally, a ceramic studio, including hand building and wheel throwing resources has been created towards the western edge of the floor; a corresponding kiln can easily be installed on the exterior grounds of the Art Center to meet all safety requirements, while maximizing the use of the ceramics studio. Supplementarily, a small painting studio where independent artists or classes can be held, has been allocated along the north-eastern corner.

The third floor provides the most privatized areas within the building, hosting two studio apartments for rotating resident artists and a range of private studio spaces that local artists may rent for classes or personal work efforts. Additionally, being the top-most floor of the building, these spaces can take advantage of additional daylighting opportunities through the implementation of skylights. While the designated built spaces within this floor are less flexible in their programmatic use, they provide opportunities for a steady source of income to fund the Waterloo Art Center.

Additional consideration was given to the basement and roof levels, where supplemental programs may be built at a later stage. For the basement, which was originally designated as a storage area that would serve the entire building, this proposal includes a photography studio comprising a dark room, a photography editing computer lab, and a small shooting set. On the roof level, currently shown as is, the program proposes a roof deck or similar small gathering space where users can casually meet and enjoy the views of the Canal and downtown Waterloo.

4.2.3 Atrium

The proposal's atrium scheme unites both the programming and facade motivations of the redesign to offer new opportunities. The effect of this is twofold: first, in generating both a greater visual and spatial connectivity between the flexibly programmed spaces of the three levels, and second in further displaying the activity of these spaces to the public way. The atrium is introduced above the reception area on the first floor, allowing visitors to enter into the space at a more human scale before expanding to exhibit the full height of the building in layers of transparencies. The void carved out by the atrium champions the dynamic, informal occupation of the open studios, and physicalizes the sense of community the Art Center seeks to capture by unifying the three levels of program in one transformative intervention. In this way, the atrium represents a distinct and memorable architectural moment that simultaneously embraces the building's history and expands its expressive potential.

5.0 Cost Analysis

5.1 Methodology

To generate the estimated cost of the many elements required for the rehabilitation, a majority of data was obtained from the estimating software RS Means. Some values that were not included in the RS Means's database were supplemented using other web-based sources. The quantities used are approximate and are based off the proposed floor plan for the building. Changes in programming, owner chosen materials, or final layout may impact the actual construction cost, but this estimate intends to provide enough information for initial budgeting. Additional modifiers to account for contractor overhead and profit, as well as change orders during construction are included in this estimate. However, as a rehabilitation project, there may be additional costs due to unseen conditions or structural repairs that will need to be addressed.

Some assumptions incorporated into the budget are:

- Removal of existing interior finishes for the application of insulation on exterior walls
- New hardwood on the ground floor, but refinishing of the existing 1st and 2nd story flooring
- Reuse of existing elevator shaft with new elevator
- Reuse of existing interior staircase
- That the basement is already damp-proofed
- That an entirely new HVAC system is required
- There are minimal necessary structural repairs

There are a variety of items not included in this budget that will need to be considered in future steps. Due to limited information about existing systems, the costs of a new electrical system and modifications to plumbing are not included, except for new lighting and plumbing fixtures. A detailed survey of the existing systems will be required to determine how much, if any, of the original systems can be reused following the rehabilitation of the building. Also not included in the estimate are furnishings beyond fixtures and permanent cabinetry. The cost of office furniture, chairs, movable desks, decorations, folding tables and chairs, and other similar items will depend on the budget and taste of the owner or program director and are not likely to be included in the initial construction budget. This budget also does not include any work performed beyond the footprint of the building, such as site work or parking areas.

5.2 High vs. Low Cost Scenarios

Two versions of the budget are presented. The *High Cost* budget, approximately \$1.2 million, and the *Low Cost* budget, approximately \$875,000. The following options are included in the high cost budget, but not in the low cost budget:

- Modification of building structure for atrium and associated skylights
- Removal of existing roofing and installation of new TPO roofing
- Construction of a wood-framed rooftop deck
- Basement photography studios (and associated extension of sprinkler and HVAC systems)
- Exterior concrete exit stairs to basement (required if basement is publicly accessible)
- Interior glass partition walls
- Aesthetic sprinkler system (opposed to more basic utilitarian appearance)
- Brand new wood framed double pane windows vs. rehab of existing windows

The value of each of these differences is included in the associated section of the cost analysis. Although presented as two separate budgets, these elements are independent and select options can be added or removed at the owner's discretion.

5.2.1 High Cost Estimate

Construction Estimate - High Cost			
Item	Quantity	Unit	Total Price
Roofing			
Removal of existing roofing	3060	Sqft	\$5,776
Roof Deck Insulation R10	3060	Sqft	\$5,279
TPO Roofing, 60 mil fully adhered	3060	Sqft	\$6,886
Aluminum Gutters & Downspouts	136.5	L.F.	\$1,381
Atrium			
Skylight with Curbs	32	Sqft	\$2,115.00
Railings/Knee Walls	300	Sqft	\$1,762.50
Demo of Existing Floor and Framing	400	Sqft	\$920
Rooftop Deck			
Deck Framing	1400	Sqft	\$4,050
Decking (Wood/Plastic Composite)	1400	Sqft	\$19,469
Deck Railing	193	L.F.	\$1,881
Basement			
Basement Slab Reinforcement	3060	Sqft	\$2,450
Basement Slab Concrete and Finish	3060	Sqft	\$13,310
Basement Entrance Walls	10	C.Y.	\$3,221

Basement Entrance Stairs	50	LF Nose	\$1,941
Basement Entrance Landing	48	Sqft	\$631
Fire Escape/Rear Entrance Stairs			
Rear Metal Stairs	1	Each	\$31,418
Exterior Walls			
Prepping Existing Exterior Siding	6200	Sqft	\$7,518
Painting Existing Siding	6200	Sqft	\$6,464
Windows			
Removal Wood Window	54	Each	\$1,474
Wood Double Hung Windows	54	Each	\$25,999
Insulation			
Sprayed Roof Insulation R19	3060	Sqft	\$6,355
Sprayed Wall Insulation R19.5	6200	Sqft	\$18,523
Interior Walls and Finishes			
Removal of existing interior elements	6120	Sqft	\$58,118
Aluminum Entrance Door and Frame	7	Each	\$12,766
Wood Interior Door	25	Each	\$11,219
Interior Painting	15350	Sqft	\$30,700
Gypboard on Existing walls	6200	Sqft	\$11,393
Interior Partition Walls	4575	Sqft	\$26,879
Interior Glass Walls	1225	Sqft	\$93,958
Sprinkler/Fire Protection			
Sprinkler System	12240	Sqft	\$107,100
HVAC + Water heating/cooling systems			
Overall Heating & Cooling System	12240	Sqft	\$306,000
Water heater, gas fired, 98 MBH input, 95 GPH, includes standard controls	2	Each	\$13,689.00
Water closet, tank type, vitreous china, floor mounted, rough in, supply	7	Each	\$5,989
Flooring			
White oak	3701.5	Sqft	\$29,241.85
Refinishing	3701.5	Sqft	\$26,373.19
Plumbing			
Lavatory, pedestal, 27" x 21"	7	Each	\$6,661.20
Kitchen sink, drop-in, steel	2	Each	\$1,627.13
Kitchen faucet	2	Each	\$375.00
Shower, stall, fiberglass, 36" x 36"	2	Each	\$2,023.58
Shower faucets/fittings, handheld, wall-mount, adjustable spray, chrome	2	Each	\$478.93
Sink, service, floor, rough-in, supply, waste and vent	7	Each	\$15,746.50
Sink, service, floor, porcelain enamel on cast iron, corner, 28" x 28"	7	Each	\$10,261.25

Millwork			
Kitchens	19	LF	\$4,655.00
Ceramic studio	9	LF	\$2,205.00
Dark Room	9	LF	\$2,205.00
Office storage	4	LF	\$980.00
Book store	16	LF	\$11,000.00
Reception	8	LF	\$1,960.00
Storage room shelves	24	LF	\$690.00
Countertops	45	LF	\$5,647.50
Appliances			
Range	2	Each	\$3,200.25
Microwave oven	2	Each	\$1,332.65
Refrigerator	2	Each	\$4,627.75
Laundry - washer	1	Each	\$2,394.44
Laundry - washer	1	Each	\$1,361.06
Vocational Shop Equipment			
Work benches, wood, average	8	Each	\$7,876.30
Dust collector, 6" dia., excl. ductwork	1	Each	\$6,878.54
Kiln, to 2,000 degrees, 16 C.F.	1	Each	\$3,456.94
Potter's wheel	8	Each	\$15,655.50
Stage equipment, portable with steps, folding legs, stock, 16" high	250	Sqft	\$8,125.00
Electric			
Lighting Fixtures (General & Display)	490	Each	\$95,543.75
Elevator			
Hydraulic Passenger Elevator, base unit, standard finish, 1500 lb, 100 fpm	1	Each	\$67,240.63
		Subtotal:	\$1,119,214.89
With Additional 10% for Change Orders, Adjustments, Etc.			\$1,231,136.38
Note: Due to the unknown condition of existing Electrical and Plumbing Systems, additional cost should be expected for removal or modification of existing conditions.			

5.2.2 Low Cost Estimate

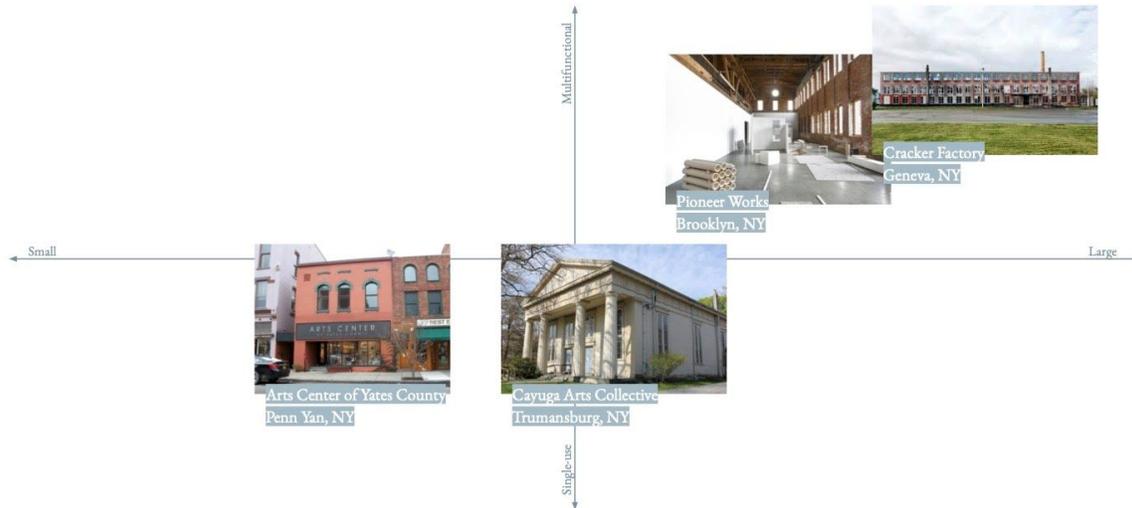
Construction Estimate - Low Cost			
Item	Quantity	Unit	Total Price
Roofing			
Repair to existing roof	3060	Sqft	\$3,000
Aluminum Gutters & Downspouts	136.5	L.F.	\$1,381
Fire Escape/Rear Entrance Stairs			
Rear Metal Stairs	1	Each	\$31,418
Exterior Walls			
Prepping Existing Exterior Siding	6200	Sqft	\$7,518
Painting Existing Siding	6200	Sqft	\$6,464
Windows			
Remove and Reset Wood Window	54	Each	\$8,309
Repair and Refinish Wood Windows	54	Each	\$10,800
Insulation			
Sprayed Roof Insulation R19	3060	Sqft	\$6,355
Sprayed Wall Insulation R19.5	6200	Sqft	\$18,523
Interior Walls and Finishes			
Removal of existing interior elements	6120	Sqft	\$58,118
Aluminum Entrance Door and Frame	7	Each	\$12,766
Wood Interior Door	25	Each	\$11,219
Interior Painting	19025	Sqft	\$32,818
Gypboard on Existing walls	6200	Sqft	\$11,393
Interior Partition Walls	5800	Sqft	\$34,075
Sprinkler/Fire Protection			
Sprinkler System	9180	Sqft	\$45,900
HVAC + Water heating/cooling systems			
Overall Heating & Cooling System	9180	Sqft	\$229,500
Water heater, gas fired, 98 MBH input, 95 GPH, includes standard controls	2	Each	\$13,689.00
Water closet, tank type, vitreous china, floor mounted, rough in, supply	7	Each	\$5,989
Flooring			
White oak	3701.5	Sqft	\$29,241.85
Refinishing	3701.5	Sqft	\$26,373.19
Plumbing			
Lavatory, pedestal, 27" x 21"	7	Each	\$6,661.20
Kitchen sink, drop-in, steel	2	Each	\$1,627.13
Kitchen faucet	2	Each	\$375.00

Shower, stall, fiberglass, 36" x 36"	2	Each	\$2,023.58
Shower faucets/fittings, handheld, wall-mount, adjustable spray, chrome	2	Each	\$478.93
Sink, service, floor, rough-in, supply, waste and vent	7	Each	\$15,746.50
Sink, service, floor, porcelain enamel on cast iron, corner, 28" x 28"	7	Each	\$10,261.25
Millwork			
Kitchens	19	LF	\$4,655.00
Ceramic studio	9	LF	\$2,205.00
Office storage	4	LF	\$980.00
Book store	16	LF	\$11,000.00
Reception	8	LF	\$1,960.00
Storage room shelves	24	LF	\$690.00
Countertops	36	LF	\$4,518.00
Appliances			
Range	2	Each	\$3,200.25
Microwave oven	2	Each	\$1,332.65
Refrigerator	2	Each	\$4,627.75
Laundry - washer	1	Each	\$2,394.44
Laundry - washer	1	Each	\$1,361.06
Vocational Shop Equipment			
Work benches, wood, average	8	Each	\$7,876.30
Dust collector, 6" dia., excl. ductwork	1	Each	\$6,878.54
Kiln, to 2,000 degrees, 16 C.F.	1	Each	\$3,456.94
Potter's wheel	8	Each	\$15,655.50
Stage equipment, portable with steps, folding legs, stock, 16" high	250	Sqft	\$8,125.00
Electric			
Lighting Fixtures (General & Display)	368	Each	\$71,657.50
Elevator			
Hydraulic Passenger Elevators, base unit, standard finish, 1500 lb, 100 fpm	1	Each	\$67,240.63
		Subtotal:	\$794,594.76
			\$874,054.24
Note: Due to the unknown condition of existing Electrical and Plumbing Systems, additional cost should be expected for removal or modification of existing conditions.			

6.0 Appendix

6.1 Analysis

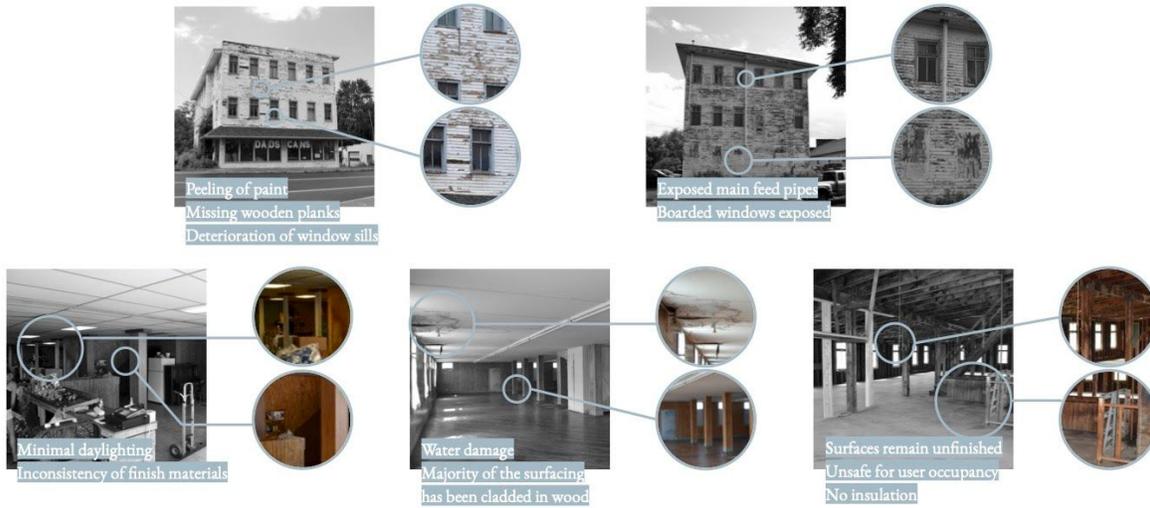
6.1.1 Precedent Analysis



6.1.2 Site Analysis

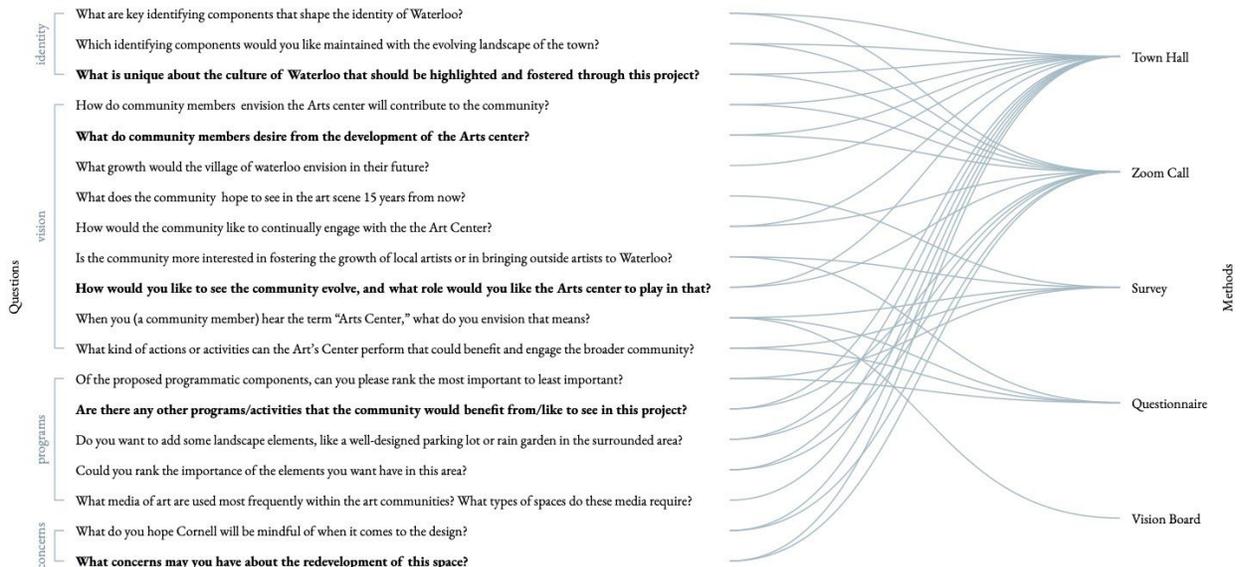


6.1.3 Building Analysis



6.1 Community Engagement

6.1.1 Methodology



6.1.2 Focus Group Interview



6.1.3 Google Jamboard

Design Connect

Oct 22, 2020

Waterloo Art Center

Thank you for joining the Village and Cornell University to have a conversation about the potential uses for 38 Washington Street! As we move forward, we will identify common themes from the conversation and incorporate them into the design.

- 1 Spend a minute in reflection.
- 2 Use sticky notes to write your thoughts in each page.
- 3 Use sticky notes or text to respond to other people's thoughts.



WHAT IS UNIQUE ABOUT THE CULTURE OF WATERLOO THAT SHOULD BE HIGHLIGHTED AND FOSTERED THROUGH THIS PROJECT?

<p>Bradley Butler - Main Street Arts Gallery (wide variety of programs)</p>	<p>Program does not have to be limited to just arts (can be the performing arts, etc.)</p>	<p>Would like to see something more visionary (less traditional)</p>
<p>Agricultural areas - Miranda Farms (cheese), Autumn Farms, Schroder Farms, etc., wineries in Canavee, farmers markets, bee pollen markets</p>	<p>Little incubations of interest for a lot of people that visit the areas around</p>	<p>Can we connect the community would appreciate arts and crafts over fine arts</p>
<p>Fill the upper space with rental spaces for artists (live-work spaces) and the idea of showing below in the larger gallery spaces</p>	<p>If the arts can be connected to the existing infrastructure (i.e. the agricultural community) - referring to the Arts & Crafts may be more attractive to the individuals in the Waterloo area</p>	<p>Filling the art space with local artists would be very easy - because most artists are looking for a physical platform to present work, the trick is to be able to show the work in the space AND have people visit the space</p>
		<p>Some towns and villages around promote the arts - not happening in the immediate area of Waterloo</p>
		<p>Agricultural community - not an artistic community</p>
		<p>The location of Waterloo (and the resulting concept) should be different enough from what is existing, people may be more willing to travel a short distance to visit the area.</p>
		<p>Creative people not from Waterloo would travel a short distance to use the space - there are not many rentable studio spaces in the area</p>
		<p>Draw from the local communities into Waterloo - make it a space that is enviable and attract artists</p>
		<p>*See Penn Yan/Yates County Art Center</p>

WHAT DO COMMUNITY MEMBERS DESIRE FROM THE DEVELOPMENT OF THE ARTS CENTER, AND HOW DO THEY ENVISION THE ARTS CENTER WILL CONTRIBUTE TO THE COMMUNITY?

<p>What is an Arts Center? How are you defining an Arts Space? What kind of studios?</p>	<p>Open up to the community to teach at different age levels</p>	<p>Using the studio space, if there is enough interest in Ceramics equipment, it would draw interest from the community at large</p>	<p>Find ways to diversify and tap into all age levels: past education, make connections with outside entities, businesses, performance groups, historical societies, etc.</p>	<p>Draw in members with Ceramics</p>	<p>How do you keep something like this afloat? Continuous bringing of artists - complicated venture</p>
<p>Should also consider theatre groups and meeting needs for practice/rehearsal spaces, performance spaces (really think about the performing arts)</p>	<p>Penn Yan and Yates County Arts Council (also connect with Seneca County Arts Council) - can tap into the existing infrastructure and begin to diversify the programs that are available</p>	<p>Fiscal concerns: booking, administration, upkeep/maintenance, some sort of employment (can only ask volunteers for so much)</p>	<p>Multiple uses all come together - organically engage the community with a space that fosters creativity at different levels</p>	<p>High school >> Senior housing >> auditoriums >> community theatre; can consider the potential for this to be connected to the Arts Center</p>	

HOW WOULD YOU LIKE TO SEE THE COMMUNITY EVOLVE, AND WHAT ROLE WOULD YOU LIKE THE ARTS CENTER TO PLAY IN THAT?

<p>The arts center can play a huge role in being an attractor to visitors from nearby areas</p>	<p>Connections with the wineries, tours, casinos - bring people into the village to shop, eat, etc.</p>	<p>The amount of interest in the Arts in Waterloo exists but is very minimal - they would have to draw from neighboring communities to survive</p>	<p>The village of Waterloo cannot sustain an arts center by itself - amount of interest in the arts is not huge</p>	<p>You have to go through Waterloo to get to some place else; you have to make it a hub where people won't drive through without stopping - we have to make it a destination</p>	<p>Waterloo's location is ideal - wine tours cross through it</p>
<p>and the changes they have tried to make, only recently have and/or this is thanks to a new tourist building, playgrounds for children, events center for weddings and events, state parks is supported, beautiful - waaa</p>	<p>There has been a turn around in the demographic of Geneva - much younger</p>	<p>Geneva - They make everything very accessible</p>	<p>Geneva is a good model to look at - Linden Street</p>	<p>There is a big industry for plan air artists - it would be really nice if the Arts in Waterloo could bring this in from Art festival would be great for Waterloo - it's very hard to get big names to come</p>	<p>Need to have good advertising that is consistent - stick with local businesses and industry but branch out just a little bit to local communities</p>
<p>Offering awards or having some financial incentive for people to invest/involve themselves with the activity that is happening in Waterloo</p>	<p>Need an arts center manager - someone who is connected, knows how to manage money and curate shows</p>				

ARE THERE ADDITIONAL CONCERNS YOU MAY HAVE ABOUT THE DESIGN PROCESS?

<p>What does the design process include/exclude?</p>	<p>Want the users to feel connected to the space that has been designed</p>	<p>Spaces that are flexible</p>	<p>Hanging systems, lighting, acoustic, backstage areas - invest in things that will make the space</p>	<p>have a ceramic artist involved in the design process. Gallery - have someone that knows about hanging and curating arts. Performance space - have someone that knows about the layout of the space and components</p>	<p>Artisan Works - maker space that is a destination for all kinds of events</p>
<p>Visual art spaces are usually wide open in the middle - can become an event space</p>	<p>Want a space for many things to happen</p>	<p>When you're thinking about the design, make sure you are thinking about income - how do you have a show space that you cannot make any money off of? Artists want to put their art someone where it can sell</p>	<p>How do we make the space survive? Rent it out for events could be crucial</p>	<p>There is a 3D model of the space on the Village of Waterloo website</p>	<p>Preserve the historical significance of the building while still making it inclusive/inviting to the public</p>
<p>Renovation of older buildings (see bark.com) - there are always facilities where people can host events</p>	<p>from a DIY perspective, make as many people feel comfortable as possible</p>	<p>Allow the space to be professional and clean but still down to earth - "I can get my hands dirty"</p>			

IN ADDITION TO THE BUILDING RENOVATION, WHAT KINDS OF LANDSCAPE ELEMENTS WOULD BE BENEFICIAL TO THE ART CENTER?

Look at the Ski Resorts in Vermont there are flowers hanging off of the canal that people want to walk around in

Place to sit during intermission for a performance

Parking

There is quite a bit of space behind the building - maximize the space for parking and walking

Sculpture Garden

Bike Path access

Can look at the Cazenovia Stone Quarry Art Park

Good maintenance of the surrounding area/landscape

The canal is an asset

Flanked by 2 car mechanic shops - in terms of aesthetics, keep in mind that it should identify with the surrounding context (it shouldn't stick out too much)

6.1.4 Questionnaire

Waterloo Community Art Center

The owners of the historic Waterloo Organ Factory on Washington Street have teamed up with the Village of Waterloo and Cornell University's Design Connect program to reinvent the building into the Waterloo Community Art Center. In addition to highlighting the work of local artists, the space aims to provide studio and event spaces available to anyone wishing to advance a culture of art and creativity in the community of Waterloo.

We hope to hear from community members like you, and learn what you think is important to a successful Art Center in Waterloo. We appreciate your time and your responses to the questions below. Please, do not feel obligated to answer every question. Thank you!

For more information, please visit this website dedicated to the project:
<https://www.waterloartcenter.com/>



What kinds of art classes would like to see available? (Check all that apply)

- Oil or Acrylic Painting
- Watercolor painting
- Pottery/Ceramics
- Acting/Theater
- Music
- Photography
- Videography
- Writing and Poetry
- Textiles
- Other: _____

Do you practice or participate in any forms of art? If so, which ones? Anything you consider personally art counts!

Your answer: _____

Have you purchased art from or supported any local artists or art venues in the past?

Your answer: _____

Do you visit art galleries in other towns/cities? If so, what do you enjoy about those galleries and what do you think should be included in a successful gallery space?

Your answer: _____

Of the proposed uses, select those that you feel are most important to the success of the center. Or recommend your own ideal (Check all that apply)

- Art classes
- Gallery space for local artists
- Rentable art studios
- Rentable event space
- Rentable/loanable equipment and materials
- Merchandise space for local crafts and products
- Live-in studios for resident artists
- Musical performance space
- Theater performance space
- Public movie showings
- Other: _____

On average, how many times a month do you visit the Waterloo waterfront?

- Never
- Infrequently
- Once a month
- Twice a month
- Three or more times a month

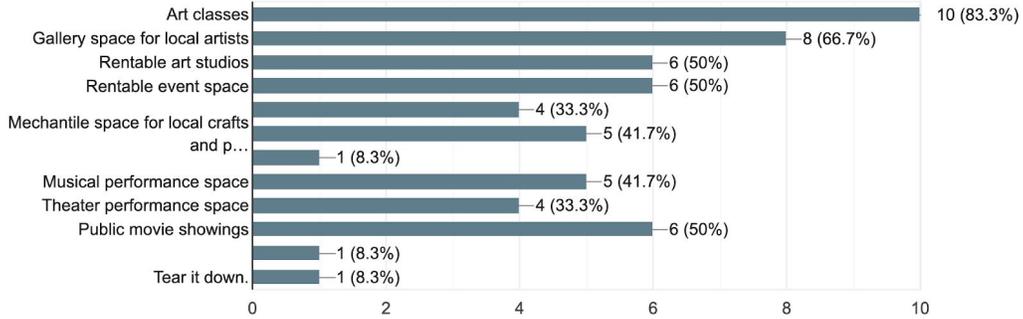
What do you think could be done on this property to make the waterfront a more attractive or enjoyable place to be?

Your answer: _____

6.1.5 Findings

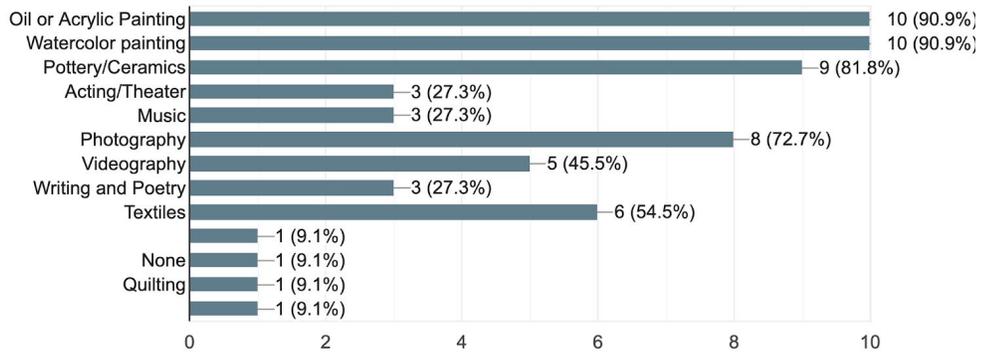
Of the proposed uses, select those that you feel are most important to the success of the center.
Or recommend your own idea! (Check all that apply)

12 responses



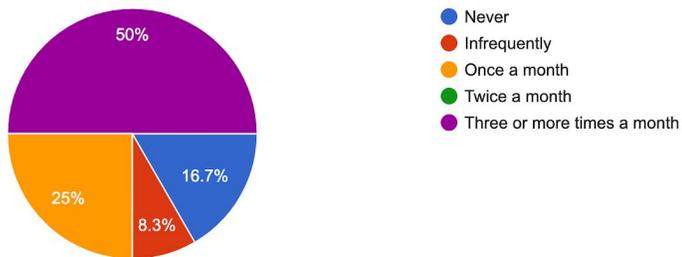
What kinds of art classes would like to see available? (Check all that apply)

11 responses

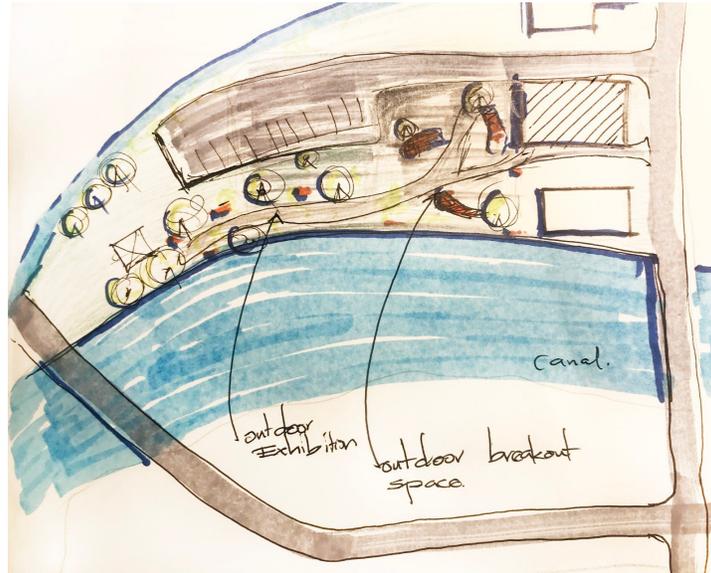


On average, how many times a month do you visit the Waterloo waterfront?

12 responses

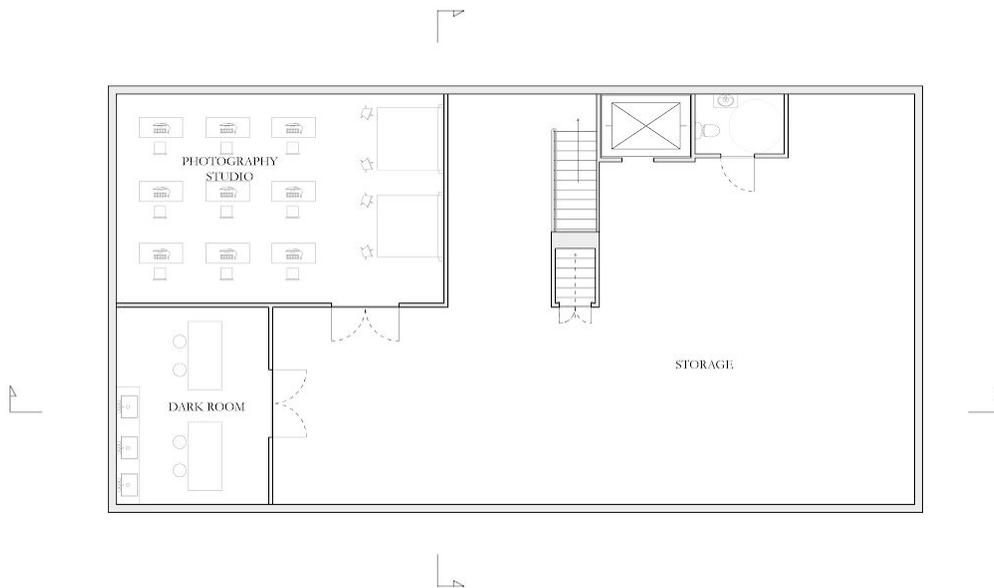


6.3.3 Site Connection Study



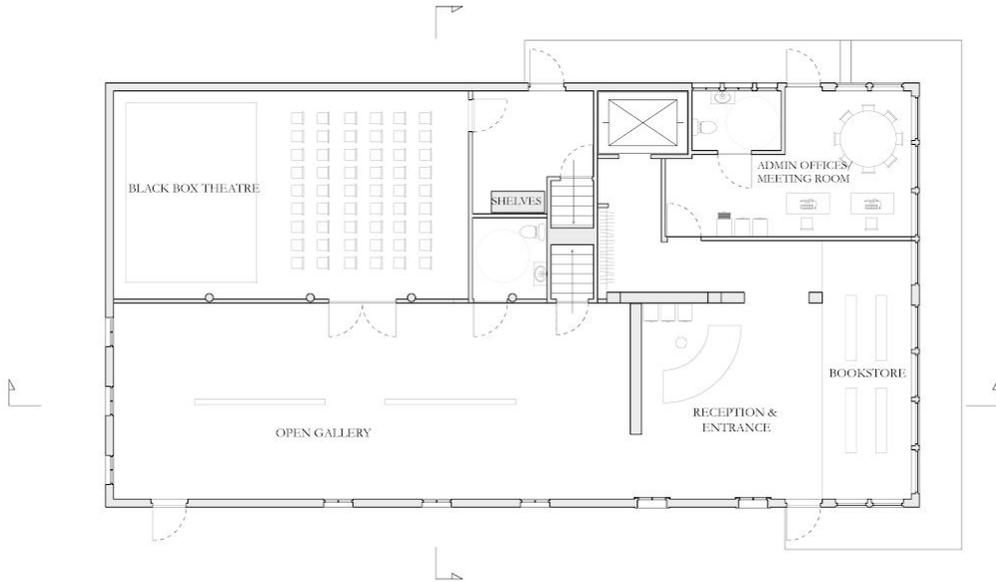
6.4 Schematic Design

6.4.1 Floor Plans

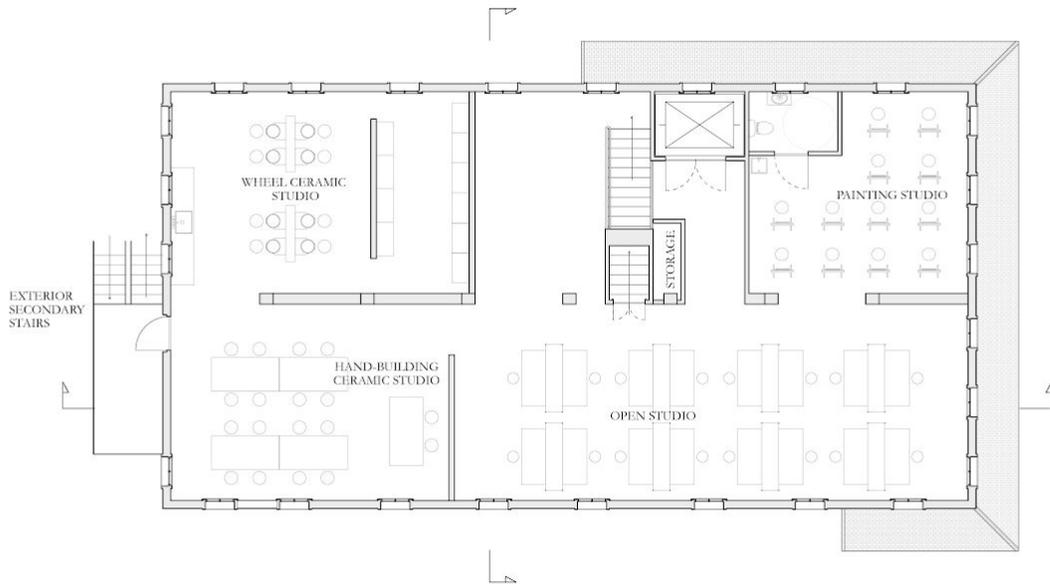


1 BASEMENT FLOOR PLAN - SCHEMATIC
SCALE: 1/8" = 1'-0"





2 FIRST FLOOR PLAN - SCHEMATIC
SCALE: 1/8" = 1'0"



3 SECOND FLOOR PLAN - SCHEMATIC
SCALE: 1/8" = 1'0"





4 THIRD FLOOR PLAN - SCHEMATIC
SCALE: 1/8" = 1'0"



6.4.2 No Atrium Scheme



6.4.3 Atrium Scheme



6.4.4 Rendering





