Marty Lindenmayer, Glenn Sanchez and Lynn Worthington.
Also present: Zanne Charity, Marge Smith, David Stein, Virginia Bush-Suttman, and Tim Tack.

## Call to order:

Marty Lindenmayer called the meeting to order to order at 3:00 p.m.

## Public Comment on agenda items:

None.

## Silver Petrucelli \& Associates presentation of Swift House Needs Assessment:

## David Stein and Tim Tack:

- Presented a second draft Needs Assessment Report to reflect first floor ADA accessibility as the priority.
- Conducted code research to confirm parking spaces, entry into the building and number of restroom required.
- Use of the second floor still needs to be determined, as an apartment would require a fire separation between the floors and an enclosed stairway.
- Making the first floor ADA compliant would trigger the need for:
- HVAC and electrical systems to be updated.
- Investigate the roof and floor framings.
- Leveling the flooring.
- Porch deficiencies.
- The level of the renovation triggers other code requirements.
- ADA compliance is not only updating the entry and restroom, it includes access to other amenities, goods and services.
- The entire floor will need to be ADA compliant.


## Next Steps:

- BoS schedule a meeting to discuss and get back to David and Tim to approve the Needs assessment.


## Public Comment:

None.

## Adjournment:

Glenn Sanchez made a motion
To adjourned the meeting at 4:23 p.m.
Lynn Worthington seconded the motion and the motion carried.
Hoyce Tearns
Joyce Kearns
Administrative Assistant

These are draft minutes and the Board of Selectmen at the subsequent meeting may make corrections. Please refer to subsequent meeting minutes for possible correct.

## RECEIVED

By Darlene Brady at 10:28 am, Apr 08, 2024


BOARD OF SELECTMEN
Special Meeting Agenda
Thursday, April 11, 2024
@ 3:00 P.M.
Hybrid Meeting - Via Zoom and
Large meeting room @ Town Hall

| Join Zoom Meeting: | $\underline{\text { https://us02web.zoom.us///86355696246 }}$ |
| :--- | :--- |
| Meeting ID: | 86355696246 |
| One tap mobile: | $+13052241968,, 86355696246 \#$ US |

Supporting documentation for this meeting:
https://drive.google.com/drive/folders/1xiS8YvGRiupVQEvTMiV5z5PVZAR168YT

1. Call the meeting to order.
2. Public Comment on agenda items.
3. Silver Petrucelli \& Associates presentation of Swift House Needs Assessment.
4. Public Comment.
5. Adjournment.

# Town of Kent Board of Selectmen 

## Swift House

Issued: April 9 ${ }^{\text {th }}, 2024$


## HISTORIC RESOURCE NEEDS ASSESSMENT REPORT

DRAFT

Prepared for:
Town of Kent Board of Selectmen
41 Kent Green Boulevard
Kent, CT 06757


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## EXECUTIVE SUMMARY

The Town of Kent retained Silver Petrucelli and Associates (SP+A) to prepare a historical evaluation, develop an efficient and economical plan for the rehabilitation of the Swift House. The team of engineers and architects was charged with surveying the existing conditions, prioritizing necessary restoration and collaborate with the Town's designated staff to confirm program uses and prepare projected cost estimates with the goal of developing a detailed plan to move forward with restoration and reuse. Anticipated restoration and renovation include ADA accessibility improvements, interior restoration based on future uses and envelope upgrades including siding \& window repairs.

## Approach

SP+A conducted on-site evaluations and investigations. Existing as-build floor plans were also drawn up to review specific conditions. This data was organized and appears in sections of this report in the form of narratives, spreadsheets and conceptual plans outlining the specific American Disabilities Act (ADA) violations, repair of deficiencies, with suggested recommendations including corrective actions, prioritization, and associated cost estimates. The following was based on visual observations. No forensic or exploratory work was assessed behind walls, within the floors, or on the roof.

## Swift House

# ASSESSMENT OF BUILDNG/PROPERTY 

Existing Conditions

## General Information

The Swift House was purchased by the Town of Kent in the early 1970's and completed restoration work by 1977. The house was originally built around the end of the $18^{\text {th }}$ century. Wood timbers in the cellar suggest there may have been an earlier structure that was built upon into what we know at the Swift House today. The lot was initially purchased by Jabez Swift in 1743, and the house was built in the Architectural Colonial style. A two-story house was added to over the years, with 2 additional structures that may have been connected at a later date shortly after the original house was built around early $1800^{\prime}$ s. The oldest portion and front elevation is prominent on Maple Street and provides an authentic historical record of Kent from circa 1800.

## Site

The building is located on Maple Street, a levellot approximately .5 acres with a two-story garage storage facility and shed to the south, Kent Barns - shops, galleries, restaurants, and small businesses across the street to the north, and a gas station on the corner of South Main Street and Maple Street to the west. There is a small Veterans monument on the property to the east of the Swift House. Apart from a small dirt and gravel driveway between the garage and the Swift House there is currently no clear vehicle access on the property with no street parking on Maple Street. Parking allocation for future building visitors should be addressed as well as a strategy for handicap parking and access. An accessible pedestrian route / sidewalk from parking into the building is a necessary component of any future use. Likewise, should an area of the site be developed for outdoor uses or activities, code mandated accessibility standards will need to be followed. In conjunction with future site revisions exterior lighting needs will be reviewed. Historically appropriate building and site lighting fixtures should be researched.

Water, sewer and gas utilities lines to the building currently exist, fed from Maple Street. As the site and building are reused, site drainage will need to be reviewed, including roof drainage, to keep water away from the building foundation.

## Swift House

## Priorities of Restoration and Renovations

## Priority 1 - Approach and Entrance

There are two main entry points to this building, the original entrance to the north facing Maple Street, and along the east side of the later additions facing Swifts Lane. Neither of these entrances are accessible.

## Approach

An approach sequence needs to be developed that includes parking, sidewalks, and a ramp leading to an accessible entrance into the building. The main entrance to the west would be the most visible approach to incorporate a ramp. Another solution could be a ramp to the back south entrance of the original building. The height needed for a ramp to this entrance is less than 30 inches eliminating the need for guardrails. For this approach more sidewalks would be needed as well as additional signage in route to an accessible entrance.

## Parking

There is currently no parking on site. Zoning designates the need for 1 parking space per 200 square feet of building square footage. As long as the property remains town owned it is exempt from this parking regulation. However, a minimum of one ADA parking space needs to be provided.

## Priority 2 - Access to Goods and Services

The building consists of two levels. The second level is accessed through the original set of stairs that are not ADA compliant. The risers are too high at 8 inches, and the treads are too narrow at 9 inches, and the stairwell width is less than 36 inches. On the second floor there are also multiple floor level changes that would need to be addressed to develop an ADA compliant floor level. The following sections capture areas of non-compliance on the main floor.

## Interior Doors and Clearances

Most door openings throughout the first floor do not meet accessibility requirements. The openings are less than 32 inches, some door thresholds are greater than $1 / 4$ inch, and the door hardware need to be replaced with new ADA door handles/hardware. There are also a few door locations that do not meet the minimum push/pull door clearance requirements. In these locations doors would have to be removed and larger openings constructed to maintain an accessible route to all the programmed spaces.

## Kitchen-Casework and Sinks

The building has remnants of a small residential kitchen in the back south addition. This kitchen on the main floor does not meet ADA requirements and should be replaced with ADA compliant countertops 34 inches from the finished floor, and a sink area with accessible clearances.

## Priority 3 - Toilet Rooms

There is one toilet room on the first floor and two toilet rooms on the second floor. The fixtures and clearances do not meet ADA requirements. On the main floor space around the toilet is less than 3 feet, where $5^{\prime}-0^{\prime \prime}$ is required. This toilet room is too small and will need to be demolished along with the adjacent coat room. Combining the floor area of these two spaces is sufficient to incorporate an ADA compliant toilet room on the main floor, consisting of new walls, fixtures, accessories, and finishes. The plumbing fixtures and piping should be gutted in their entirety. New accessible toilet rooms will be required with reuse of the building.

## Priority 4 - Code/Health/Life Safety Issues

## Framing

The post and beam wood framing appears to be in good condition. There are no visible signs of rot or water damage. There are some areas of the roof that appear to be sagging and should be reviewed by a structural engineer. Roof framing that may need to be reinforced can be identified and rafters can be checked for deterioration from any leaks.

Pervious renovations of the building have reinforced the existing floor on the main floor level with additional wood columns in the basement. There were no visible signs that these columns sit on any structural footings. Further structural analysis by others is recommended. Reinforcing existing floor joists could be performed by shortening framing spans or doubling up, "sistering" of framing members. Future use may affect the room layout which would also involve possible framing revisions.

## Roof

The existing roof appears to be in good condition, with the newest layer of asphalt shingles appearing to have been installed within the last 10 years. Although there have been patch repairs in the past, structural rafter and beam repairs may be required due to roof sagging, deterioration, and previous deficient modifications to the roof area over the years. Rafters in historic structures are often undersized and do not meet current code loading requirements. Further structural analysis by others is recommended.

## Main Floor Storage Room

The storage room addition floor pitches significantly to the outside. This is an indication of an original porch that was later enclosed. The flooring will need to be removed to rebuild the floor joist to level out the floor and comply with ADA standards and guidelines. The floor joists may need to be reinforced depending on size.

## Second Floor - Not Accessible/Code Compliant

There are currently two stairwells in the house. Both are in poor condition and are not ADA compliant. Future use of the building will determine if a new ADA compliant stairwell is required. If there are plans to use the second-floor renovation or relocation of stairs to the $2^{\text {nd }}$ floor should be explored as design options.

## Swift House

Most door openings throughout the second floor do not meet accessibility requirements. The openings are less than 32 inches, some door thresholds are greater than $1 / 4$ inch, and the door hardware need to be replaced with new ADA door handles/hardware. There are also a few door locations that do not meet the minimum push/pull door clearance requirements. In these locations doors would have to be removed and larger openings constructed to maintain an accessible route to all the programmed spaces.

There are two toilet rooms on the second-floor level. The fixtures and clearances do not meet ADA requirements. The space around the toilets are less than 3 feet, where $5^{\prime}-0^{\prime \prime}$ is required. The existing toilet room that is elevated 15 inches from the second-floor level should be removed and not considered for an ADA bathroom location without major structural renovations. Other locations, possibly adjacent to the existing kitchen, should be considered for an ADA compliant toilet room consisting of new walls, fixtures, accessories, and finishes.

## Fire Separation between the first floor and Second floor

If the second floor is designated as a new use group and used as an apartment a fire separation of the floor assembly is required per IBC code section 508.4 Separate Occupancies. Since the building does not have a sprinkler system, the fire rating of the floor assembly would need to be 2-hr rated. With a sprinkler system the required fire rating is 1-hr. 2-hr rated wood floor assemblies would incorporate multiple layers of fire-resistant gypsum board as well as a poured fluid applied gypsum floor underlayment on the $2^{\text {nd }}$ floor. This would also trigger the need for any penetration in the floor assembly to be fire-rated including lighting fixtures. A different use group on the second floor would also require a stairwell enclosure that would only work with an addition. In an existing building these scenarios would be very expensive and not recommended.

## Priority 5 - Building Performance Issues (Building Envelop)

## Insulation

The original house has minimal floor insulation on the main floor level. Appropriate Insulation should be installed between the floor joist in the basement. The additions were built on a foundation crawlspace. Floorboards will need to be temporarily removed to install insulation between the floor joists on the main floor level in these locations.

The walls appear to have minimal or no insulation at all. To heat and cool this building efficiently, insulation should be installed within all the perimeter walls on the exterior.

## Windows

The windows, mostly consisting of single pane 12 over 12 and 6 over 6 double hung, are in fair condition. Restoration of these windows will be costly and the final product, even with functioning storm windows, will not be as energy efficient as a new window. The decision whether to restore original windows or replace them with new is complex and balances the desire to preserve building history with energy conservation and cost considerations. It is the preference of historic commissions, at all levels, to restore original building features, such as windows, trim or moldings, wherever possible. If it is too deteriorated and costly to repair, an argument can be made for new windows, however the
replacement should be a very close match to the size, configuration, depth, profile and shadow lines of the original.

## Priority 6 - Finishes

## Interior finishes

The interior walls are wood studs, and some plank studs, with lath and plaster, and in some locations wallpaper coverings. Interior finishes are in fair to poor condition. Some walls and ceilings are cracked and peeling and will require repairs and refinishing at a minimum. The exterior walls in the oldest portion are very thin with minimal insulation value. Gutting the finishes of the exterior walls, and most interior walls would provide an opportunity to insulate and locate new wiring and utilities. The condition of the plaster ceilings varies around the building. Some ceilings are cracking and need replacement while others are in serviceable condition and could possibly be patched and reused. Reconfiguration and reuse of the building will require removal and reconstruction of most plaster or drywall finishes.

Wood windows and doors are trimmed with historic casing profiles that can be salvaged and replicated where patching may be required. The fireplaces, now symbolic, are focal points in several rooms that contain original wall panels, mantel and trim details that should be maintained and refinished. There are some existing built-in painted wood shelves and cabinets that may be salvaged for reuse depending on future needs. Flooring is a combination of wood plank with an added layer of finish flooring in some areas. Finished flooring will generally need to be refinished, with a few wood floor areas that need to be repaired.

## Exterior Siding

The wood clapboard siding, with a $4-1 / 2^{\prime \prime}$ exposure, is in overall good condition but will require repairs for a full restoration. The siding is serviceable with repairs and proper preparation and painting. Assuming there is existing lead-based paint, it would need to be scraped and removed as part of the preparation for exterior painting. This will need to be treated by a licensed contractor. Door and window, as well as roof edge trim will likewise require repainting/repairs. The original portion of the building has wood trim detailing. The trim details appear to be mostly in sound condition but will need to be confirmed at the upper reaches of the building.

## Swift House

Historic Resource Needs Assessment

## Proposed Concept Design and Use (see appendix for drawings)

## Proposed Site Plan

The proposed site design will require minimal grading of exiting soils and a new bituminous pavement parking lot. The design includes 1-ADA parking space, concrete walking paths, and minimal landscaping. The proposed design will have a welcoming entry drive and a defined parking zone with easy access to concrete walkways leading to a new ADA ramp entrance to the south side of the Swift House.

## Proposed First Floor Plan

The proposed design is a minimal intervention with an intent to preserve the original architecture while allowing flexibility of program use and the following elements:

- ADA entry ramp
- ADA compliant toilet room with new fixtures, accessories, and finishes.
- Kitchen. The kitchen in this design option will be fully upgraded with millwork, appliances, and finishes.
- Stairs/stairway. New ADA compliant stairs are included in this design option with a 3 feet wide stairwell, handrails, and compliant treads and risers. The entryway has been closed off as a dedicated access to program space on the second floor.
- The program consists of an entry welcome/information center with a combination of office, meeting/classroom, and storage space. The new layout on the first floor has the flexibility to open up and combine spaces for a variety of programmatic needs.


## Proposed Second Floor Plan

- An ADA toilet is required with program use on the second floor.
- The kitchen has been redesigned with new millwork and appliances.
- The program consists of office and meeting space supported with a kitchen, toilet room, and storage.
- The second floor only requires one exit as long as it is a business use with a maximum of 29 occupants.


## Recommendations

Restoration of historic materials, framing, finishes and details should govern the rehabilitation efforts while upgrading the building for accessibility, creating new program spaces, and providing modern utilities - plumbing, electrical, mechanical and code required life safety systems. Reconstruction or room changes should use authentic materials, interior and exterior, restoring and replicating details present in the house. The second floor can be used without the addition of an elevator if no unique program or space resides on the second floor which is not also located on the accessible first floor. The code requires accessibility for the public, workers, and visitors alike for future uses and especially toilet facilities.

## Swift House

In the short term, an accessible approach sequence needs to be developed that includes parking, sidewalks, and a ramp leading to an accessible entrance into the building. Continuing into the building, all programmed space on the main level should be made accessible, which includes accessible doorway openings and clearances. A new ADA toilet room will be required, and the kitchen should be rebuilt with ADA standards and guidelines.

Concurrent with accessible work, basic repairs should be made to the building. Roof framing and floor framing should be reviewed in detail, with specific deficiencies and deterioration addressed as part of structural reinforcement that may be needed. The rear porch deficiencies should also be addressed in conjunction with this scope.

In the medium term, to preserve as much of the structure as possible, the exterior of the building should be made weather-tight with window repairs or replacement.

In the long term, the interior of the building should be restored and renovated. This includes room layout changes, windows, siding repair \& painting, doors, thermal envelope, and new finishes. On the interior the building is more than likely a full plaster removal, "gut" renovation retaining as many of the original trim details, paneling, and historic features, such as the fireplaces, as possible. Renovating the interior finishes will allow for more seamless modern utility and code upgrades.

## Mechanical

## General

The building's mechanical systems are in poor condition and past their expected service life. The building has been heated only, therefore if cooling is required in the proposed scope of its use, modernization of these systems will be necessary.

## HVAC - Existing

## Heating

Aside from the original wood-burning fireplaces throughout the facility, heating for the building was later provided by an oil-fired furnace with limited ducting to spaces on the First Floor. A 275-gallon indoor fuel storage tank in the basement adjacent to the furnace provided the fuel source. There is no secondary containment or automatic monitoring system for the oil tank, and it appears more contemporary than the equipment it serves. Flue gases are vented from the boiler to a stone and masonry chimney. The furnace is in a condition where re-commissioning is not a consideration.

Air supply grilles are located in various locations throughout the First Floor to heat that area. Heat then rises through ceiling grilles to the Second Floor using ceiling to floor penetrations via the buoyancy of heated air through these openings, and most likely through stairs as well. Electric-resistance baseboard heating is provided elsewhere on the Second floor in areas where the rising heat was not sufficient.

A natural gas service is not currently serving the building, but an LP gas storage tank, along with an apparently abandoned aboveground fuel oil storage tank were against the building at the rear of the original structure.

## Air Conditioning and Ventilation

There is no air conditioning in the building and ventilation is provided by operable windows.

## HVAC Systems - Proposed

## General

The new systems will be designed in accordance with the 2021 Connecticut State Building Code, the 2021 Connecticut Fire Safety Code, and other applicable standards, ordinances and regulations.

The facility will meet the minimum requirements for ventilation of the International Mechanical Code. Natural ventilation may be provided where openable window area is 4 percent of the floor area of the space being ventilated, otherwise mechanical ventilation will be provided. Mechanical ventilation will consist of outside air ducted from wall louvers to the central HVAC systems and are the highest recommended type of ventilation system especially in light of general indoor air quality (IAQ) and COVID concerns.

Systems will meet the minimum efficiency requirements of the International Energy Conservation Code. New HVAC equipment will also meet the minimum efficiency requirements for available rebates under energy efficiency incentive programs presently being offered.

## Heating System

The existing oil-fired furnace and oil tank will be removed, and a new central HVAC system will be installed.

Ductless Split System Heat Pumps can be provided by installing wall mounted Fan Coil Units in spaces where heating and cooling is to be required. Due to the existing building envelope air conditioning may not be appropriate for the entire building without insulation and vapor barrier modifications, and consideration of the performance of the single-pane windows under air conditioning conditions. However, included with the infrastructure required for this type of HVAC system comes the ability of integral heating capacity satisfy the heating requirements of the facility. The type of options available in these types of systems range from air-sourced, water sourced and geo-exchange with a ground loop heat exchanger. Air-sourced and water sourced have exterior "condensing units" or cooling towers, respectively; geo-exchange systems rely on a field of multiple closed-circuit wells below ground and removed from the historic viewshed. The main benefit to the use of VRF split-ductless heat pumps is in the minimal disruption by large ductwork, with only the need to run small, flexible refrigerant piping, which minimizes impact to the historic fabric of the structure.

## Plumbing

## Plumbing - Existing

## General

The new systems will be designed in accordance with the 2021 Connecticut State Building Code, the 2021 Connecticut Fire Safety Code, and other applicable standards, ordinances and regulations.

## Domestic Water Supply

A 1 -inch domestic water service stubs through the stone foundation at the basement level. A water meter is installed but appears to be obsolete and non-functioning at present. The domestic water system is comprised of several pipe material types where visible: mainly bronze and copper. All the materials are in fair condition but appear to be approaching their useful service life expectancy.

## Natural Gas Supply

As mentioned above, natural gas is not piped to the building at present.

## Domestic Water Heating

A 40-gallon electric-resistance, storage tank-type domestic water heater located in the basement serves the plumbing fixtures of the existing building. The water heater is in fair condition but based on a $10-$ 12 year anticipated service life, it should be considered to be in need of replacement. It has no recirculation capability, which would be required in a modern code compliant system.

## Drainage, Waste and Vent

A 4-inch sanitary line exits the basement of the building. Piping is cast iron (CI) hub and spigot and appears to be original to the installation based on its exposed routing in some of the locations. It is most likely past its useful service life and its appearance indicates it is corroded and in poor condition. Camera scoping would be recommended in the case of considering it to be reused.

## Miscellaneous

Plumbing fixtures throughout the facility are outdated and do not meet ADA standards for accessibility. New fixtures with low water consumption configurations and ADA access would be recommended.

## Plumbing Systems - Proposed

## Water Supply

A new water service, meter and cold/hot water supply distribution piping will be provided to new plumbing fixtures. The water distribution may be sweated copper, press-fit copper or PEX tubing. Hot water piping will be insulated in accordance with the International Energy Conservation Code.

## Domestic Water Heating

New water heating equipment may be tank type gas fired or electric and will meet the energy efficiency requirements of the International Energy Conservation Code. A hot water recirculating loop shall be provided for temperature maintenance of hot water flow to lavatories, sinks, etc. The water distribution may be sweated copper, press-fit copper or PEX tubing. Hot water piping will be insulated in accordance with the International Energy Conservation Code.

## Drainage, Waste \& Vent

Drain and vent piping will be provided for each plumbing fixture and drainage receptor. Cast iron nohub drainage pipe and fittings will be used; PVC as an alternate. The new drainage system will connect to the existing building drain service.

## Plumbing Fixtures

Water closets will be fabricated of vitreous china and will be floor-mounted tank type. Lavatories will be wall hung or counter-mounted as required and fabricated of vitreous china. Sinks will be fabricated of stainless steel or enameled cast iron. Attention will be given to the appearance of the fixtures and trim in an effort to blend with the character of the architecture.

ADA compliant plumbing fixtures will be provided where required. ADA compliant fixture supplies and drains will be provided with insulated covers.

Plumbing fixtures will meet the Plumbing Code requirements for water conservation per the IECC.

## Fire Protection

There is no existing fire protection service serving the building. A new service and distribution would be required should there be a requirement to install sprinklers. It is assumed at this point that sprinklers will not be required.

## Electrical

The existing electrical system consists of two circuit breaker panels with one located in the basement and the other located in the attic. There is a 200 amp , single-phase service for the house provided via an overhead run from Maple Street to a 2-gang meter on the northeast corner of the building. It appears that each panel is separately metered. While the electrical distribution equipment is of modern construction, it is in poor condition and has little to no space for added loads. Phone service is run overhead to the building along a similar route as the power with a second overhead communication line to the northwest corner.

Electrical wiring within the building varies in age and condition. Much of the observed wiring has metallic sheathing (likely BX style) with some newer nonmetallic wiring (type NM). Some old cloth style insulation which becomes brittle, especially when exposed to heat likely exists. There is a limited amount of modern style Romex wiring, but we suspect that most of the wiring concealed in the walls and ceilings is of the older styles. Power outlets are provided in limited quantity in most spaces. All of these were observed to be 3-wire, grounded type. No GFI or arc-fault devices were noted as required by current code.

Interior and exterior lighting for the house consists of old incandescent fixtures. The majority of the fixtures were in poor condition and should not be considered for reuse. Lighting control is provided via manual toggle switches in most locations and pull chains in others. A limited number of emergency lights and no exit signs were observed. Given their age and condition, most lighting should not be considered for reuse. The possible exception could be the exterior porch lights if these are determined to be of historical significance.

There is no fire alarm system serving the building, nor any residential smoke alarms. There is minimal telephone service wiring scattered through the space and no security equipment of any kind.

## Recommendations:

In short, no electrical components within the building should be considered for long-term reuse. The existing service equipment could be used to support an initial project phase aimed at keeping the building weather-tight, warm and protected from vandalism. We recommend that new wiring be provided to any new equipment installed during this phase. A similar approach could be used for any renovation work to the kitchen or toilet rooms. The need for two electrical meters should be evaluated and a single, larger electrical service provided if appropriate. A new 200 amp , single-phase service is sufficient for the current building use but a 400A service should be considered if significant air conditioning, kitchen or elevator loads are included in the project.

One major challenge to any electrical improvement work will be routing of new wiring. While wiring can be routed horizontally through the basement and attic spaces to most points in the building, the existing plaster and lathe wall and ceiling construction will make concealing new wiring in some areas very difficult. Ideally, architectural improvements will involve removing a majority of these wall and ceiling finishes to allow for new wiring installation. Installation of new electrical panels in the basement and attic can further ease the rewiring of the facility. The attached estimate for rewiring assumes the removal of essentially all existing plaster ceilings and walls.

New electrical devices should be provided throughout the facility. Lighting controls can be provided to enhance the energy efficiency of the building. New power outlets can be provided in a quantity suitable to meet the intended uses of the space and should be brought up to current Electrical Code requirements with tamper resistant style and GFCI or arc-fault protection.

Reuse of historic light fixtures in a facility like this is often a goal but we did not observe any lights which were both historic and in a condition which could be saved other than perhaps the exterior porch lights. If fixtures were previously removed from the building and stored for reuse, we would want to refurbish these for use in the facility. All new lighting in public spaces should be of a style appropriate for the historic nature of the facility or should be hidden from view (in coves, etc.). This can still be accomplished in an energy efficient manner with the use of LED fixtures or LED bulbs. Exit signs will need to be provided to meet Building Code requirements for the intended use of the space. Emergency lighting can be provided in a visually sensitive manner via the use of inverters powering the normal light fixtures.

Installation of a fire alarm system could be considered for enhanced protection of the facility. A modest security system could also be considered for added protection. There is limited phone service and no visible internet service in the building. The eventual needs of such systems should be considered so that wiring can be appropriately placed when walls or ceilings are opened.

## Code Standards

Current Building Codes for State of Connecticut

| Connecticut State Building Code | 2021 IBC/2022 CT Amendments |
| :--- | :--- |
| Connecticut State Existing Building Code | 2021 IEBC/2022 CT Amendments |
| Connecticut State Fire Code | 2021 IFC/2022 CT Amendments |
| Connecticut State Mechanical Code | 2021 IMC/2022 CT Amendments |
| Connecticut State Plumbing Code | 2021 IPC/2022 CT Amendments |
| Connecticut State Energy Conservation Code | 2021 IEC/2022 CT Amendments |
| Connecticut State Electrical Code | 2020 NFPA 70/2022 CT |
|  | Amendments |
| Connecticut State Health Code | Most Current |
| OSHA | Most Current |
| Section 504 | Current |
| ADA | 2010 |
| ANSI 117.1 | 2017 ICC/Ansi A117.1 |
| NFPA 101 | 2021 NFPA 101/2022 CFSC |

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## PHOTOS

## Architectural

## Exterior






Swift House



## APPENDIX

## NEEDS ASSESSMENT ESTIMATES

PROJECT COXT CHART
CONCEPTUAL ESTIMATE SUMMARY

Existing Site Plan
Existing Floor Plan
Proposed Site Plan
Proposed Floor Plan
Condition Assessment

| Swift House |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14-Feb-24 |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { TAG } \\ & \text { NO. } \end{aligned}$ | ASSESSMENT | SYSTEM/ CODE REFERENCE | RANKING |  |  |  |  |  |  | CORRECTIVE ACTION | ITEMIZED ESTIMATED COST | REMARKS |
|  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | ALT\| |  |  |  |
| SITE CONDITIONS |  |  |  |  |  |  |  |  |  |  |  |  |
| S01 | Accessible parking and route to the building is lacking | 206.3 (ADA) | 1 |  |  |  |  |  |  | Provide paving for parking space(s) as needed, parking signage and striping, tactile warning | \$25,000 |  |
| S02 | The building requires an accessible entrance, which will likely include an exterior ramp. | 404.2.4 (ADA) | 1 |  |  |  |  |  |  | A ramp to provide access, likely to the east side or the back (west side) of the house. | \$28,000-\$40000 |  |
| S03 | An accessible path from parking to the ramp is required to meet ada requirements | 206.3 (ADA) | 1 |  |  |  |  |  |  | Provide concrete sidewalks from parking lot to ramp | \$15,000 |  |
| S04 | Site grading, surface drainage, landscaping and fence repairs |  | 1 |  |  |  |  |  |  | Restore function and beauty of property. Ensure proper drainage. | \$25,000 | Minimal low maintenance landscaping |
| ARCHITECTURE CONDITIONS |  |  |  |  |  |  |  |  |  |  |  |  |
| A01 | There is no accessible entrance to the building. | 206.4 (ADA) | 1 |  |  |  |  |  |  | Provide new flush exterior door / entrance at ramp location into building. | \$4,000 |  |
| A02 | Back porches are in need of repairs. Peirs are missing at some locations | 1105.1 (IBC) | 1 |  |  |  |  |  |  | Reconstruct back west entry landing and steps. Repair south entry steps and landing. Install concrete peir footing at both locaitons. | \$25,000-\$36,000 |  |
| A03 | Main floor level doors and hardware in fair to poor condition. Most locations do not meet the minimum opening of 32 inches, and Push/Pull clearances are not comoliant. | $\begin{aligned} & 404.2 .4 .1 \\ & \text { (ADA), 413.6 } \\ & \text { (ADA), 1101.2 } \\ & \text { (IBC), 117.1 } \\ & \text { (ANSI) } \\ & \hline \end{aligned}$ |  | 2 |  |  |  |  |  | Future uses and interior plan changes will help determine how many of the original doors \& hardware can be reused. Some locations will require removal of doors and construction of wider openings. | \$20,000-\$35,000 | Entrances, new accessible toilet rooms and other modern amenities may require new. |
| A04 | Main floor level Kitchen is in poor condition and not ADA compliant | 4.32 (ADA) |  | 2 |  |  |  |  |  | provide a new kitchen with ADA casework, countertops, and sink clearances. | \$40,000 |  |
| A05 | Main floor level existing toilet room is in poor condition and not ADA compliant | $\begin{aligned} & \text { (B) } 1108.0 \text { (ANSI } \\ & \text { A117.1) } 603- \\ & 606 \\ & \hline \end{aligned}$ |  |  | 3 |  |  |  |  | Provide new accessible toilet room including an area for a mop sink, per code. | \$30,000 |  |
| A06 | Second floor level doors and hardware in fair to poor condition | $\begin{aligned} & 404.2 .4 .1 \\ & \text { (ADA), 413.6 } \\ & \text { (ADA), 1101.2 } \\ & \text { (IBC), 117.1 } \\ & \text { (ANSI) } \\ & \hline \end{aligned}$ |  |  |  | 4 |  |  |  | Future uses and interior plan changes will help determine how many of the original doors \& hardware can be reused. | \$10,000-\$15,000 | Entrances, new accessible toilet rooms and other modern amenities may require new. |
| A07 | Second floor level existing toilet rooms are in poor condition and not ADA compliant | $\begin{aligned} & \text { (B)1108.0 (ANSI } \\ & \text { A117.1) } 603- \\ & 606 \\ & \hline \end{aligned}$ |  |  |  | 4 |  |  |  | Provide new accessible toilet room. | \$30,000 |  |
| A08 | The storage room addition floor pitches significantly to the outside. This is an indication of an original porch that was later enclosed. |  |  |  |  | 4 |  |  |  | Remove flooring and rebuild floor joist to level out the floor. Floor joist may need to be reinforced depending on size. | \$8,000 |  |


| 14.Feb-24 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { TAG } \\ & \text { NO. } \end{aligned}$ | ASSESSMENT | SYSTEM/ CODE REFERENCE | RANKING |  |  |  |  |  | CORRECTIVE ACTION | $\begin{gathered} \text { ITEMIZED ESTIMATED } \\ \text { COST } \\ \hline \end{gathered}$ | REMARKS |
| A09 | Previous renovations of the building have reinforced the existing floor on the main floor level with additional wood columns in the basement. There were no visible signs that these columns sit on any structural footinas. |  |  |  | 4 |  |  |  | Further structural analysis by others is recommended. Reinforcing existing floor joists could be performed by shortening framing spans or doubling up, "sistering" of framing members. Future use may affect the room layout which would also involve possible framing revisions. | \$50,000 | Full extent of framing repairs to be determined. |
| A10 | Roof has been repaired in the last 10 years due to evidence of previous water damage. There are visual signs of roof sagging indicating a lack of structural inteoraty from the rafters. |  |  |  | 4 |  |  |  | Reinforce deficientundersized ratters. A structrual investigation is needed | \$25,000 |  |
| A11 | Stairs to the second floor are not ADA compliant. | $\begin{aligned} & \text { ADA - SECTION } \\ & 504,802.2 .1 \\ & \text { (IEBC) } \\ & \hline \end{aligned}$ |  |  | 4 |  |  |  | Construct new ADA compliant stiars that match original architecture | \$20,000-\$25,000 |  |
| A12 | Basement windows in fair to poor condition |  |  |  |  | 5 |  |  | Repair and/or Replace | \$3,500 |  |
| A12 | Original windows paint peeling and energy inefficient. Sashes in poor condition. |  |  |  |  | 5 |  |  | Window restoration options: Repair / retrofit exiting wood sashes with insulated glass and paint. Interior storms," inner glass," Or replace windows with new wood windows of the same pattem and profile. | \$65,000-\$110,000 |  |
| A13 | Existing insulation is minimal, not in existing wall cavities |  |  |  |  | 5 |  |  | Provide new exterior wall insulation inside of assembly. <br> Provide attic and crawlspace insulation. | \$45,000 |  |
| A14 | Interior finish floors: poor condition in some areas. |  |  |  |  |  | 6 |  | Floors in bathrooms and south addition need to be removed and reconstructed. Restoration possible for some original wood plank floors (?) | \$50,000 |  |
| A15 | Existing siding is in fair, serviceable condition. Small areas of siding are damaged, and trim missing. |  |  |  |  |  | 6 |  | Restore (repair and replace) damaged siding and trim. Prep and paint all exterior wood features. | \$75,000-\$110,000 |  |
| A16 | Interior plaster, walls and ceilings in need of repair and replacement |  |  |  |  |  | 6 |  | Remove, reconstruct and/or refinish most of the interior surfaces. Restoration of limited plaster surfaces, trim and paneling. | \$75,000 | Confirm original plaster composition. Balance restoration with future reuse needs and utilities. |
| A17 | Existing interior trim \& paneling is salvagable. Most walls and ceilings are candidates for replacement |  |  |  |  |  | 6 |  | Paint entire interior, including trim and paneling. | \$35,000 |  |
| A18 | Stairs to the second floor are not ADA compliant. | $\begin{aligned} & \text { ADA - SECTION } \\ & 504,802.2 .1 \\ & (\text { IEBC }), 508.4 \\ & (\text { IBC ) } \end{aligned}$ |  |  |  |  |  |  | A fire rated enclosued stairwell may be required depending on use of the second floor. A separate use group would trigger the need for this type of enclosure. | \$110,000 |  |
| FIRE PROTECTION SYSTEMS |  |  |  |  |  |  |  |  |  |  |  |
| F01 | New Sprinkler Systems and Service |  |  |  |  |  |  | ALT | New Wet-system for heated areas and dry-pipe system for attic | \$75,000 |  |
| PLUMBING SYSTEMS |  |  |  |  |  |  |  |  |  |  |  |
| P01 | Domestic Water Heater in Basement near end of useful life. (Main Foor) |  |  | 3 |  |  |  |  | Replace Water Heater with Electric Water Heater \& Recirc Loop. | \$10,000 |  |



| 14-Feb-24 |  |  |  |  |  |  |  |  |  |  |  |
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| $\begin{aligned} & \text { TAG } \\ & \text { NO. } \end{aligned}$ | ASSESSMENT | SYSTEM/ CODE REFERENCE | RANKING |  |  |  |  |  | CORRECTIVE ACTION | ITEMIZED ESTIMATED COST | REMARKS |
| ELECTRICAL SYSTEMS |  |  |  |  |  |  |  |  |  |  |  |
| E01 | Exterior Lighting Replacement (ADA approach) | General | 1 |  |  |  |  |  | Add exterior light fixtures to improve safety, limit vandalism and meet earess requirements. | \$1,500 |  |
| E02 | Emergency Lighting Replacement (Main Floor Level) | NFPA 101 |  | 2 |  |  |  |  | Add battery units for temporary coverage or an Inverter in new lights are installed to meet current code for egress lighting | \$2,500 |  |
| E03 | Exit Sign Addition \& Replacement | NFPA 101 |  | 2 |  |  |  |  | Install new exit signs in areas to meet current code | \$4,200 |  |
| E04 | Replacement of electrical service with 3phase 400A service | General |  | 2 |  |  |  |  | Replace aging equipment and increase the service to be able to handle new mechanical and potentially elevator loads. | \$8,400 |  |
| E05 | Power for Mechanical Equipment | General |  | 2 |  |  |  |  | Provide power \& disconnect switch for various new mechanical equipment | \$7,000 |  |
| E06 | LED Lighting \& Control Replacement (Main Floor Level-bathroom) | General |  |  | 3 |  |  |  | Replace all fixtures with LED lighting and controls with occupancy sensors. | \$1,500 |  |
| E07 | Emergency Lighting Replacement (All spaces, both floors) | NFPA 101 |  |  |  | 4 |  |  | Add battery units for temporary coverage or an Inverter in new lights are installed to meet current code for egress lighting | \$8,000 |  |
| E08 | LED Lighting \& Control Replacement (All spaces, both floors) | General |  |  |  | 4 |  |  | Replace all fixtures with LED lighting and controls with occupancy sensors. | \$16,000 |  |
| E09 | Exterior Lighting Replacement (Entire site) | General |  |  |  |  | 5 |  | Add exterior light fixtures to improve safety, limit vandalism and meet egress requirements. | \$2,000 |  |
| E10 | Fire Alarm System Replacement | NFPA 72 |  |  |  |  |  | 6 | Allow for eventual complete replacement of the fire alarm system. | \$8,750 |  |
| E11 | Rewiring of Entire Facility | NFPA 70 |  |  |  |  |  | 6 | Replace all exisitng electrical wiring in the building with modern, grounded materials. Use type MC armored cable unless the occupancy classification is residential. | \$14,000 |  |
| E12 | Addition \& Replacement of Receptacles | NFPA 70 |  |  |  |  |  | 6 | Add receptacles to new spaces as well as replace any receptacles that are not working or have been abused. Best done in coniunction with wiring replacement. | \$7,000 |  |
| E13 | Site Lighting Addition | General |  |  |  |  |  | 6 | Add pole lights to parking lot if driveway is redone. | \$4,900 |  |



Swift House - Project Cost Chart Anaylsis

| Priortios | Project Costs |  |
| :---: | :---: | :---: |
| P1: Approach and Entrance | \$ | 146,500.00 |
| P2: Accoss to goods and Sorvicos | \$ | 264,100.00 |
| P3: Tollet Rooms | \$ | 113,000.00 |
| P4: Codo/HealthLife Safoty Issues | \$ | 202,500.00 |
| P5: Building Perrormance Issues (Buliding Envelop) | \$ | 160,500.00 |
| P6: Finishos | \$ | 304,650,00 |
| Alternates | \$ | 185,000.00 |

PRIORITIES 1-3 TOTAL ESTIMATED COSTS $\quad \$ 523,600.00$

Prierities 1-3 addross ADA compllance on
the main floor level

## Restoration/Repair and Renovation

Existing Building: 3,000 SF

Opinion of Probable Construction Costs - conceptual design

| DIVISION | TASK | SUBTOTAL |
| :---: | :--- | ---: |
|  |  |  |
| 1 | GENERAL CONDITIONS, OH+P | $\$ 185,000$ |
| 2 | DEMOLITION AND EXISTING CONDITIONS | $\$ 40,000$ |
| 2 | ABATEMENT (TBD) | $\$ 0$ |
| 3 | CONCRETE WORK | $\$ 35,000$ |
| 4 | MASONRY | $\$ 0$ |
| 5 | STEEL AND METAL WORK | $\$ 15,000$ |
| 6 | WOOD | $\$ 174,000$ |
| 7 | THERMAL \& MOISTURE PROTECTION, EXTERIOR WALLS | $\$ 167,500$ |
| 8 | DOORS, WINDOWS AND HARDWARE | $\$ 152,500$ |
| 9 | INTERIOR FINISHES | $\$ 220,000$ |
| 10 | SPECIALTIES | $\$ 0$ |
| $11 \& 12$ | EQUIPMENT \& FURNISHINGS | $\$ 0$ |
| 22 | PLUMBING | $\$ 100,000$ |
| 23 | HVAC | $\$ 172,000$ |
| $26-28$ | ELECTRICAL | $\$ 85,750$ |
| 32 | SITE WORK | $\$ 65,000$ |


| CONSTRUCTION SUBTOTAL <br> CONSTRUCTION CONTINGENCY (10\% ) | $\mathbf{\$ 1 , 4 1 1 , 7 5 0 . 0 0}$ <br>  <br> CONSTRUCTION TOTAL |
| :--- | ---: |


| A/E DESIGN, BID \& CA (8\%) | $\$ 112,940$ |
| :--- | ---: |
| BID PRINTING \& LEGAL NOTICES | $\$ 5,000$ |
| MISCELLANEOUS FEES, MATERIAL TESTING | $\$ 10,000$ |
| OWNER CONTINGENCY (10\%) | $\$ 141,175$ |
|  |  |
| SOFT COST TOTAL | $\$ 269,115.00$ |
| TOTAL PROJECT COST | $\$ 1,822,040.00$ |
| TOTAL PROJECT COST WITH ALTERNATES | $\$ 2,042,040.00$ |

APPROXIMATE SQUARE FOOT CONSTRUCTION COSTS: $\$ 470.58$

EXCLUSIONS:
HAZARDOUS MATERIAL ABATEMENT, ENVIRONMENTAL SITE HAZARDS, UNSUITABLE SOILS, BUILDING COMMISSIONING \& FINANCING COSTS







[^0]:    Swifj House

