

## **Section V - Conclusion**

### **Five Year Action Plan and Recommendations:**

Several code deficiencies were identified as part of the building assessment report for the Fairfield County Museum, but since the museum is an existing historic building that is continuously occupied throughout the duration of the Five Year Improvement Plan, and is also not changing occupancies, these deficiencies are not required per code to be addressed. The county may want to consider the addition of a freestanding genealogy research building on site that would house a research room, storage for original materials in an appropriate climate controlled area, and code compliant ADA accessible restrooms and building access (as the existing building is currently not ADA accessible to the research room, and adding these elements in a separate building would allow the Ketchin House to be used for the museum function in its entirety). Below is the overall strategy that we recommend to be employed for each priority, to be addressed by the county as funds become available over the next five year period. Items are prioritized and the owner should complete items in the first priority category before moving on to the future priorities. The owner may seek to combine some line items with one contract in order to obtain better pricing for the work, but each line item is priced separately as an individual item to make it easier for the owner to divide into smaller projects with contractors. First priority items should be addressed in 2018, second priority items addressed in 2019 and 2020, and third priority items should be addressed in 2021 and 2022. Costs given for each of these line items is provided based on construction occurring in the years indicated above, and a delay in implementation of these items will potentially result in higher construction costs due to an increased time frame.

#### First Priority

- Architectural:
  1. Hazardous material testing by third party inspector. Once determined, any friable conditions should be abated as part of this work.
  2. Repair front door surround and stop water infiltration into the building interior (gutter system and sloped top)
  3. repair plaster ceiling at interior entry
  4. repoint brick at exterior (50% of wall surface contains damaged mortar joints)
  5. clean brick, remove vegetation
  6. replace spalling brick on exterior at front entry façade (30% of wall surface)
  7. Provide waterproofing at basement retaining walls - excavate walls and apply new waterproofing from foundation to 1' above grade level, and seal with termination bar. Repair wall finishes with water damage once work is complete.
  8. Repoint and reflash all chimneys.
  9. Repairs to rear door to make operable; retrofit door hardware to make ADA accessible; repair paint; change swing of door and add new stops and threshold
  10. Window repairs - remove sashes, number parts and pieces, remove paint, consolidate wood on sashes, sills, jambs, and heads, repaint, repair any broken glass, add new weatherstripping, and reinstall
- Structural:
  1. Have geotechnical investigation done to determine causes of settlement and possible solutions (helical piers or push piers)
  2. Repair the cracked lintel over the crawl space access on the east façade. Provide new steel beam. Repairs to the opening below the lintel should be made with the door and window repairs around the building.

- Mechanical:
  1. Replace the basement flue venting system.
  2. Address combustion air deficiencies to ensure flue vents properly draft.
  3. Address basement unit installation issues.
  4. Address condensate overflow issues.
  5. Miscellaneous code related plumbing corrections.
- Electrical:
  1. Replace existing emergency egress lighting units
  2. Provide/replace exit signs
  3. Replace existing duplex receptacles and provide GFI type where required

#### Second Priority

- Architectural:
  1. Provide new sidewalk from street to rear ADA accessible door of museum
- Structural:
  1. Install helical piers or push piers and new concrete foundations along north and south sides
- Mechanical:
  1. Provide for outdoor air ventilation and humidity control.
  2. Replace HVAC systems and replace or remove duct systems. Provide split heat pumps with ductless indoor units for each space, concealed. One split should be dedicated 100% outdoor air unit for ventilation and dehumidification, with new ductwork routed down through the chimneys to each room.
  3. Upgrade existing plumbing fixtures in basement for ease of use and water efficiency.
- Electrical:
  1. Pricing Option 1 for Fire Alarm: Upgrade of new Fire Alarm system, see electrical narrative for details

#### Third Priority

- Architectural:
  1. Repair Plaster Ceilings on third floor (concurrent with sprinkler and fire alarm work if desired)
  2. Provide new shutters at building exterior
  3. Remove rust from exterior railings, repair and repaint with high performance black gloss paint
  4. Provide new batt insulation at the attic floor level for increased energy efficiency.
  5. Shingle-over style ridge vent be installed, with eave ventilation for increased ventilation in attic.
- Mechanical:
  1. Due to overall expense, installation of a fire sprinkler system is included here.
  2. Provide new ADA accessible restroom and drinking fountain at the location of the Pantry on the first floor. Provide janitor's sink in basement at location of existing restroom.
  3. Replace and upgrade restroom ventilation systems.
  4. Upgrade HVAC controls for ADA accessibility.
- Electrical:
  1. Pricing Option 2 for Fire Alarm: Provide Fire alarm system upgrade concurrent with sprinkler system upgrade. See electrical narrative.
  2. Provide provisions to add directional display lighting where desired
  3. Provide additional exterior lighting and security cameras
  4. Make electrical panel in attic code accessible

5. Provide new wiring to the receptacle and lighting branch circuits (minimal throughout to include the first and second floor lobbies and mid stair landing)