### Pond Cove Annex – Lower Level

#### General

- 1. The ceiling in most of the spaces consists of 12"x12" acoustical ceiling panels applied directly to wood strapping. This strapping is applied directly to the bottom of the floor structure above and leaves no ceiling cavity for the running of mechanical systems.
  Only the wiring systems are concealed within the existing joist space. Because the ceiling is directly fastened in place, the possibility for removing portions of the ceiling for access and to run new utilities does not exist. It was reported that it is very difficult to snake wiring through the ceilings to accommodate new equipment.
- 2. The ceilings are very low with various soffits projecting down between 6'-10" and 7'-1" above the floor.
- 3. All piping (hot water heat and sprinkler) is exposed to the space. Care was taken in the placement of the piping; however, it is abundant and runs throughout the lower level.
- 4. The entire lower level lacks any mechanical ventilation system and has very poor natural air circulation due to the number of separate rooms and the arrangement and enclosure of the rooms.
- 5. Moisture is a concern on humid days throughout the entire facility; it can become especially uncomfortable in the lower level of the building due to the very poor air circulation.
- 6. Lighting on this level consists of surface mounted strip florescent fixtures housed in acrylic housings. This type of fixture is functional and is commonly used in utility type spaces. They introduce glare into the space and create visual "hot spots" throughout the space.
- 7. The entire lower level is partially below grade with short windows placed along the ceiling line. Views to the exterior are few and natural day lighting is minimal on the lower level.

#### **Mechanical Room**

8. Chimney in Boiler Room may have some asbestos insulation on it. Will requiring testing prior to commencing any alterations.

#### **Maine Collection**

9. There are no mechanical provisions that allow for separate conditioning of the space as a meeting room or to protect valued materials that are stored in the room.

#### **Records Preservation Area**

10. The main electrical service entrance is located In the NW corner of the space. This should be in an enclosed mechanical type space.

## **Historical Storage**

11. A wet pipe sprinkler system and hot water heat piping are located within this area. This is not advisable since leaking or engagement of the sprinkler system could potentially damage irreplaceable historic materials.

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## Pond Cove Annex - Upper Level

#### General

- 12. The interior organization reflects a classic floor plan for a school of its time. The interior spaces offer high ceilings with large windows which offer views to the exterior as well as the introduction of abundant natural light deep into the space. Currently, these windows are partially concealed by a suspended acoustical tile ceiling system.
  - The suspended ceiling constrains the once grand space and covers up an original plaster ceiling that exists almost 12 feet above the floor. The original ceiling appears to be in disrepair due to past construction activities and leakage.
- 13. The entire second floor, although mostly open, does not have very good air circulation and has moisture problems on humid days.
- 14. The space does not have central air conditioning. There are two wall mounted air conditioning units placed at each end on the south wall of the Pond Cove Annex that are not adequate during the warmer days of the year. They also are very loud and disruptive while in operation.
- 15. The distance between the stacks in the open stack area is very tight, typically 32". This presents an ADA accessibility issue as the required clear space is 36". Clearance at the end aisles are also an issue as they are too narrow to meet ADA guidelines.
- 16. Floor framing was observed to be typically 2"x10" (actual) at 16'oc where it was exposed from floor below. This framing is supported by a series of closely spaced beams below that alternate between wood and steel. Building plans indicate that the original floor structure was supplemented with new steel columns and steel beams, most likely to meet floor loading requirements for library use at that time. However, floor loading capacity is likely less than the 150 lbs. per sq. ft. required by current code.
- 17. Lighting consists of acrylic lens 2x4 recessed fluorescent fixtures. This type of fixture generally cost effective yet creates glare.
- 18. There are no bathroom facilities on the upper level. All bathrooms for this wing are located on the lower level.

#### Connector

- 19. The Circulation Desk is located directly in front of the front doors. This exposes library staff to blasts of cold air during the winter months each time the doors are opened.
- 20. The entire area is not large enough to function well as an entrance lobby. The area serves as a space where people meet and converse with each other. Unfortunately, this activity competes with the checkin and check-out function and is also disrupted by deliveries.
- 21. Deliveries must be made through the front door. There is no separate loading dock/delivery area that avoids delivery pedestrian conflict.
- 22. It was reported that the heating system in this area does not work well and that there are extreme swings in temperature that cannot be adequately controlled.
- 23. The entry floor level is directly accessible to the walks on the exterior, but does not share a common floor plane with any floor of the other library structures.

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## Spurwink School and Spurwink School Annex - Lower Level

#### General

- 24. The ceiling in most of the spaces consists of 12"x12" acoustical ceiling panels applied directly to wood strapping. This strapping is applied directly to the bottom of the floor structure above and leaves no ceiling cavity for the running of mechanical systems.

  Only the wiring systems are concealed within the existing joist space. Because the ceiling is directly fastened in place, the opportunity to remove portions of the ceiling for access and to run new utilities does not exist. It was reported that it is very difficult to snake wiring through the building for new equipment.
- 25. The ceilings in the Spurwink School are very low, 6'-9"with various soffits projecting down to 6'-7" above the floor. This is well below what current codes allow.
- 26. The ceilings in the Spurwink School Annex are very low, 6'-7" above the floor. This is also well below what current codes allow.
- 27. All piping (hot water heat and sprinkler) is exposed to the space.
- 28. The entire lower level lacks any mechanical ventilation system and has very poor natural air circulation due to the arrangement and enclosure of the rooms housed there.
- 29. Moisture on humid days is a concern throughout the entire facility. This is especially true on the lower level of the building due very poor air circulation. The area can become quite uncomfortable on hot, humid days.
- 30. There is one unisex bathroom on this floor that serves the entire wing. This is quite inadequate considering that the rest room serves both the meeting room and the entire children's area.
- 31. Lighting on this level are surface mounted strip florescent fixtures housed in acrylic housings. This type of fixture is functional and is commonly used in utility type spaces; however, they do introduce glare into the space and visual hot spots throughout the space.
- 32. The entire lower level is partially below grade with short windows placed along the ceiling line. Views to the exterior are few and natural day lighting is minimal to these spaces.
- 33. Existing documents indicate that all of the perimeter exterior foundation walls were not insulated during the last renovation. They should be insulated.
- 34. One of the exits from the Meeting Room is through a bulkhead type of arrangement that does not have proper headroom or landings at the top of the stairs.

# Spurwink School and Spurwink School Annex - Upper Level

#### General

35. The Spurwink School is a traditional one room schoolhouse. It is located on the south end of the library facility in front of the Spurwink School Annex, which was added in 1957. The original schoolhouse has a long history of being moved from various locations throughout the town. The exterior conveys a classic New England School aesthetic with its two articulated front entrances. Each door enters into a small enclosed vestibule type space. Behind the entrance lies a single open space with a rhythm of vertical double hung windows along each side. Several renovations have occurred over the years that have greatly diminished the interior's historic character. These renovations include the addition of two ADA lifts and the removal of the rear wall that now opens directly into the Annex addition.

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- 36. One of the entrance vestibules currently serves as a very cramped office space. The other serves as an emergency access, access to a set of stairs that leads to the lower level and a data system wiring panel. These data panels are found in several location in the facility and ultimately should be relocated to secure dedicated wiring closets.
- 37. The existing floor framing of the Spurwink School Annex consists of 1 ½" x 9" (actual size) at 16"oc spanning in a north to south direction. This floor framing is supported by a center beam which consist of 4-1 ½" x 9" (actual size) members spliced together. The framing rests on a wood ledger and is framed into the side of the center carrying beam. It was reported that the library shelving on the floor in the Children's Library is widely spaced and can only be 48" tall because the floor's loading capacity is not sufficient to support greater stack height or density. This greatly limits the usefulness and flexibility of the space. (see also engineering assessment that confirms this)
- 38. As in the remainder of the building, humidity is an issue.
- 39. The entire wing lacks a mechanical ventilation system.
- 40. Several issues with water penetration along the perimeter exterior walls of the Annex were reported. Visual evidence of this can be found in several locations where the interior wall finishes are peeling away from the wall framing and staining is present. Evidence also exists around the windows. This includes wood rot and movement of the wall and windows when only slight pressure is applied.
- 41. The windows in the Annex neither match, nor compliment those of the historic schoolhouse. They appear foreign in both size and proportion.
- 42. There are no bathroom facilities on the upper level. The only restroom for this wing is located in the lower level.
- 43. Lighting consists of acrylic lens 2x4 recessed fluorescent fixtures. This type of fixture is generally cost effective. However these fixtures also create glare and ceiling hot spots.
- 44. A direct ADA accessible access/egress does not exist. The front exit leading out onto the existing front porch has a large step at the exit doors.

### **Code Issues**

- 45. Stairs up to Children's Library from Circulation Link have 7 ½" risers. 7" is the maximum allowable under code.
- 46. Ceiling height in the Meeting Room in the Lower Level of the Spurwink School Annex is 6'-7".
- 47. Ceiling height in the Parenting Collection Area in the Lower Level of the Spurwink School is 6'-9" with a beam projection running through the space at 6"-9".

## **Facilities Manager identified Deficiencies**

- 48. The ADA mechanical lifts are unreliable and have serious operational issues. They are difficult to keep operating and it has become next to impossible to get replacement parts. It was also noted that people with disabilities and many elderly residents who have difficulty with stairs don't use the Library because of accessibility issues. When they are operating at all, the lifts are very loud and that people are uncomfortable using them.
- 49. The existing electrical service for the facility is only 400 amps, which is too small. Electrical service needs to be upgraded simply to support existing electrical needs. The current system is currently maxed out. Existing power is single phase. The Facilities Manager said he was not sure if 3-phase is available in the area. The upgrade should be a minimum of 600 amps, with 800 amp service preferred.

- 50. At a minimum, the entire heating system needs to be replaced as it is old and very inefficient. Heating costs for the Library are very high for the size of the facility with an annual fuel consumption of over 8,000 gallons per year. It was also noted that there may be asbestos in the current system on the flue and in the roping. (See also the engineering report that questions whether a replacement HVAC system was feasible)
- 51. The current system does not provide adequate provision for controlling the level of heat provided to most spaces.
- 52. The Spurwink School section is heated with a kerosene-fired boiler. This system is especially problematic as large temperature fluctuations occur due to not having a system that has appropriate control capabilities.
- 53. There is a separate mechanical room for the annex as well as the Spurwink School. The electrical service entrance, electrical panels and telephone/data panels are also located in several different areas throughout the facility. This creates inefficiencies and security issues by not having these functions in centralized dedicated spaces.
- 54. The existing buildings also do not have a perimeter drainage system. This can be a problem at times. Issues also exist with the interior floor drains. They are not always reliable.
- 55. Underground oil tanks exist on the site. These abandoned tanks should be removed.
- 56. There are several windows and window framing in the Spurwink School addition that are rotten. These need to be replaced.
- 57. The existing skylights have been a problem and have required frequent maintenance. They sweat and drip. The lack of a ventilation system and humidity control contributes to this issue.
- 58. Lighting currently stays on all day in most areas. Occupancy sensors should be considered to turn off lighting in unoccupied spaces.
- 59. The only back-up emergency power is supplied by batteries. A diesel generator should be considered to power egress lighting and provide continuous mechanical services to the areas housing historical items.
- 60. The existing gutter system on the annex has been shingled over and is no longer in use. Proper venting in the attic of the Annex needs to be addressed. Currently, the only ventilation is through the cupola. Perimeter ventilation at the eaves should be provided to enhance cross ventilation. The existing cupola also needs modifications to make it weather-tight. Currently wind-blown rain and snow enter the attic space through it.
- 61. There are not enough parking spaces for the facility. The existing parking is sufficient for normal library use but is inadequate for events and special programs.
- 62. Existing parking lot lighting is inadequate.
- 63. Lighting along the walking surfaces is inadequate and is problematic especially during the winter months.
- 64. The Library Entrance is on the north side of the building which creates exposure and icing issues during the winter months.
- 65. The roof on the Spurwink School wing is failing and is in need of repairs and resurfacing.
- 66. Protection from the weather and a water collection system is needed near the entrance.

- 67. The water collection system for the parking and entrance areas needs to be updated. Currently there is a catch basin located at the bottom of the parking lot where the entrance walk to the library begins. All the water from the parking runs towards the front door and flooding occurs at times during the winter months when the basin becomes blocked. This condition requires a lot of extra attention from the Town crews to monitor and maintain so that water does not back up into the library.
- 68. The configuration of the existing floor plan makes it impossible to visually supervise many of the library areas.
- 69. Lack of a delivery point requires that all deliveries come through the front door in conflict with the library patron traffic. This also results in visual clutter with stacks of boxes and mail collecting at the front desk.
- 70. The sprawling configuration of the existing facility makes it difficult and costly to staff and maintain.
- 71. The presence of many columns in the meeting room space impedes sight lines.
- 72. There is no outside access to the meeting room for after hours use.
- 73. Plowing of the existing site presents a couple of obstacles. Currently the only place to pile the snow is at the end of the parking lot, opposite the entrance.
- 74. The existing sidewalks are bituminous. Future consideration should be made to providing concrete walks.
- 75. The utilities to the facility currently run overhead. Future consideration should be given to moving them underground.
- 76. The facility lacks a fire sprinkler system in many areas including roof and ceiling cavities and roof overhangs. These spaces are currently unprotected.
- 77. Water flow to the existing fire suppression system is marginal.
- 78. Existing accessibility for fire personnel and apparatus is currently acceptable.

## **Engineering**

- 79. The wood framing of the older sections of the library have been in service beyond the normal design life for a building and are being used to support loads larger than originally intended for this type of construction.
- 80. Low headroom in both basements limits the ability to reinforce or replace existing floor to support greater loads.
- 81. Possibility of significant structural damage as well as mold in areas where water has been infiltrating.
- 82. Existing heating systems are at the end of their useful life. The physical layout and construction
- 83. Plumbing facilities are functional but do not meet current standards for water usage and efficiency.
- 84. The electrical system is nearing or is at capacity.
- 85. Most of the wiring is non-metallic sheathed cable and needs to be brought up to current National Electrical Code.
- 86. Federal Pacific Electric Company disconnect switches and load (breaker) distribution panels are known and documented fire hazards (it is our understanding that these have been replaced)
- 87. Fire alarm system is fragmented and outmoded.

## **Technology**

- 88. The building lacks a structured technology infrastructure (main distribution frame, wiring closets, backbone, etc.)
- 89. Many data lines are exposed and therefore are vulnerable (not secure).
- 90. Non-structured technology infrastructure is difficult (and expensive) to service/maintain.
- 91. Fragmented design is awkward for providing quality wireless signal throughout facility.
- 92. No dedicated server space is available in the library (computer servers are currently housed elsewhere)
- 93. Meeting room lacks standard AV resources, e.g., ceiling mounted data projector, integrated PA, system)
- 94. Facility lacks security/surveillance system.
- 95. Public computer printer is inconveniently located at the circulation desk.
- 96. Historical Preservation Society lacks appropriate space for digitizing resources
- 97. Furniture used for technology (public computers) is not ergonomically appropriate.
- 98. Circulation and sorting tasks are handled manually (lack of self-check, automated sorting, etc.)

#### General

- 99. Multi-level design of facility, location of the circulation desk and lack of real elevators mean that most materials being shelved are hand carried rather than trucked to stack areas. This is very inefficient in terms of staff usage.
- 100. Proximity of some highly used materials (videos, audio books) to the circulation desk is not good. This is also very inefficient in terms of staff usage.
- 101. Children's area lacks child appeal (primary colors, comfortable child-friendly seating areas, etc.)
- 102. Primary comfortable seating in adult area is located in an area that can be noisy (too close to the reference desk to provide a quiet, pleasant, relaxed reading environment)