

BEACON STREET SCHOOL MAINTENANCE FACILITY

28 Beacon Street

Year Constructed: 1963
Year of Renovation/Addition: NONE
Building Type: S-2
Construction Type: III B
Fire sprinklers: No
Total Floor Area: 10,735 SF
Floors: First
Assessor Lot # 030 0045 0000



GENERAL: The building appears to provide ample space for the activities and equipment of the School Maintenance Department. The main structure appears basically sound but needs some improvements to prevent future accelerated deterioration. A rear shed has been added to the building with a questionable structure that can be reinforced. Portable spaces have been added to one end of the building. One section should be removed. The other one is not of quality construction but apparently meet the office space needs of the building. Floor levels do not align and an extended ramp system needs to be developed. The office space wing appears underutilized, although it is reported used during the summer months. If this is ever increased to a full year use replacement with a permanent structure should be considered. The septic system is not functioning properly.

LIFE SAFETY: N/A

HEALTH:

2 Septic system requires regular pumping. Replace with new Title V system with a raised bed (high water table).

HAZARDOUS MATERIALS:

No Asbestos Containing Building Materials where present as indicated by the 2012 AHERA Report.

ADA COMPLIANCE:

4 There is a ramp in the office area that has a step. Ramp needs to be replaced to eliminate step. Include railings. (Space currently un-used but reportedly used in the summer).



3 There are no handicapped accessible toilet fixtures. Provide handicapped accessible toilet facilities for both men and women.

3 All doors have knobsets and need to be replaced with lever hardware.

3 Drinking fountain is not ADA accessible and needs to be replaced with a dual height unit.

SITE:

2 Floor drains pass through a trap into a drywell. This needs to be replaced with a tight tank with alarms

EXTERIORS:

Parts of the structure are in poor repair. Multiple portions of the structure do not appear to be engineered and good detailing practices have not been observed.

3 One of the added buildings attached to the office spaces should be removed and the remaining walls made watertight.

2 A number of penetrations have been made through the metal roof deck and then later infilled without added support. These need to be framed with steel channel headers and trimmers to support roof loads.

2 There are no control joints in the exterior CMU walls and as a result walls have numerous cracks. The cracks need to be repaired by cutting out damaged sections of CMU and creating straight control joints with sealant and backer rod to resist water infiltration and damage due to freeze-thaw cycles.



3

The structure of the exterior shed is not well anchored. This structure consists of a hodgepodge of wood framing and does not appear to be engineered. Hardware (Simpson Strong-Tie) should be added to reinforce the connections and stabilize the wood framing. Also, wood blocking should be added between all rafter bays at bearing points and the rafters be connected to the supporting members and columns with hardware (i.e. hurricane ties). Select members need to be replaced that are determined to be damaged beyond repair by warping and/or moisture. The entire structure needs to be evaluated and engineered drawings be prepared for to establish required repairs.



If future significant work is planned for the building, the temporary wing of the structure will need to be replaced with an engineered, founded, and anchored structure.

INTERIORS:

2

At the wood stair and landing to the mezzanine, the railing should be replaced with an engineered railing to withstand code required loading. Stair has uneven treads and risers, especially the top riser. Stair needs to be reconstructed to unify the riser heights and tread depths. Code compliant railings and guardrails should be provided.



2

Penetrations have been made through the joists at the landing without any reinforcement. Add reinforcing metal gusset plates on each side of each opening.

3

There are numerous cracks in the concrete garage slab on grade. Repair the cracks by removing loose material, applying a bonding agent, and installing a cementitious patch material. (Approx. 130 LF).



4

Replace all interior carpeting in the office areas preferably with sheet vinyl or similar.



- 3 Vinyl floor tile in office, lounge, parts room and toilet is worn and needs to be replaced. Floor tile is also missing at the water heater and needs to be replaced.



- 3 Paint all office space walls.



- 3 Exterior wall cracks are visible on the interior of the building and need to be repaired as described for exterior cracks. Repaint wall areas.



- 3 Paint unpainted sections of walls (680 SF) and enclosed end bay.



- 3 Door at main entry rusted at bottom of door and door frame in end bay is badly rusted and needs to be replaced.



ENERGY & WATER CONSERVATION:

- 3 All windows are single glazed steel framed. Either add storm panels to interior or replace entire window. Include Low-E insulating glass.



- 3 Weather-stripping at overhead doors is not functioning and needs to be replaced.



MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION:
(see individual reports for detailed description).

- 4 The building is currently un-sprinklered. A new fire sprinkler system should be added.
- 3 Domestic water piping throughout building is un-insulated. Insulate all water piping.
- 2 Domestic Water Pressure is above 80 PSIG. Install master pressure reducing valve.
- 2 Hose bibs have no cross connection control. Install cross-connection control on all interior and exterior hose valves.
- 2 Gas PRV vents are too close to doors. Pipe PRV vents to locations that are at least 10 feet from doors.
- 2 Ceiling mounted air filtering unit is not wired. Unit needs to be made functional.
- 4 Vertical gas unit heater in garage office is aged and needs to be replaced.
- 3 Electric heaters and self contained air conditioning unit in the office area are aged and are not being used except during Summers. Replace A/C units.