



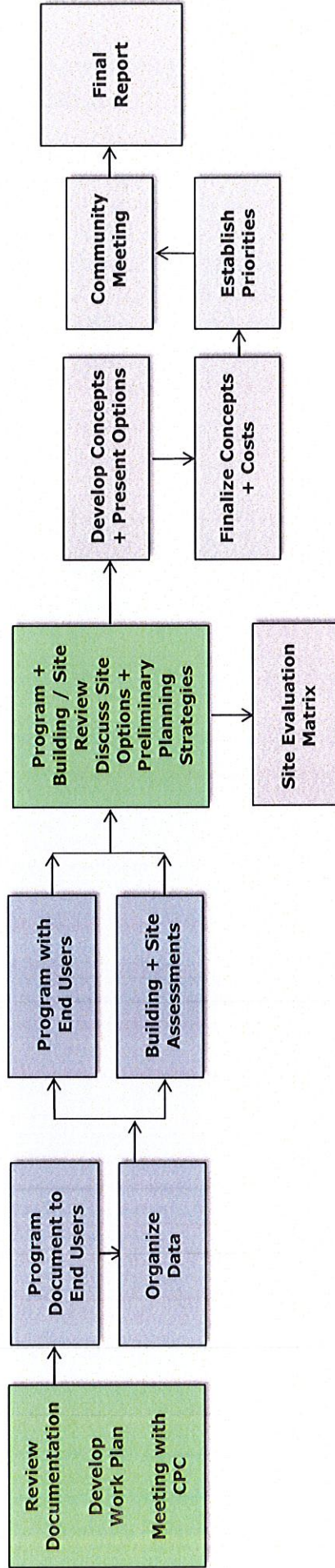
**PUBLIC FACILITIES IMPROVEMENT PLAN
FAIRHAVEN, MA
JANUARY 23, 2018**

AGENDA

- Review process to date
- Identify issues at each building:
 - Deferred maintenance
 - Inefficiency
 - Growth
- Discuss potential site options for new structures
- Next Steps

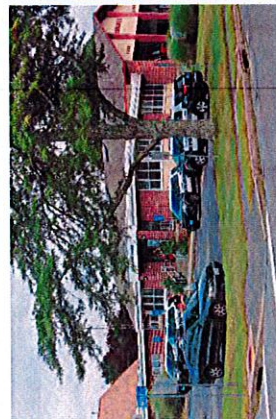
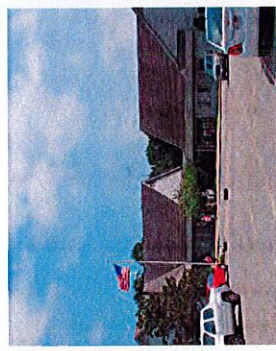


MASTER PLANNING PROCESS



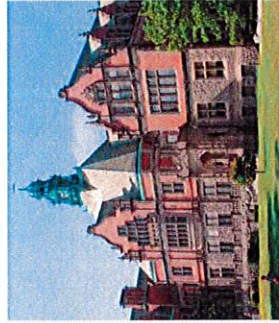
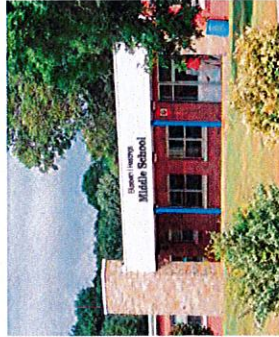
MASTER PLANNING PROCESS

- **Renovation / Expansion / Replacement**
Public Safety
Recreation / Senior Center
- **Operable Conditions: Plan for Future Rehabilitation or Maintenance**
Town Hall
Millicent Library
BPW Buildings & Facilities
Emergency Management
Animal Shelter

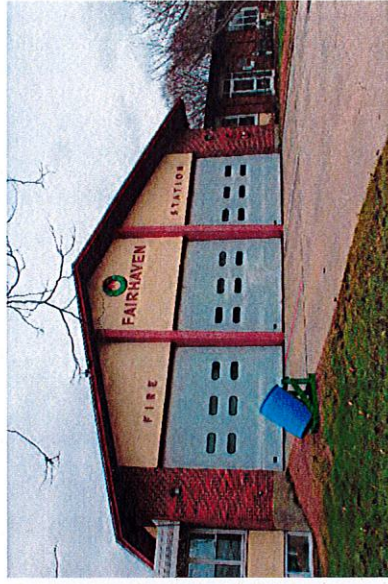
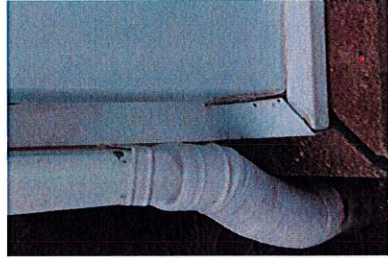
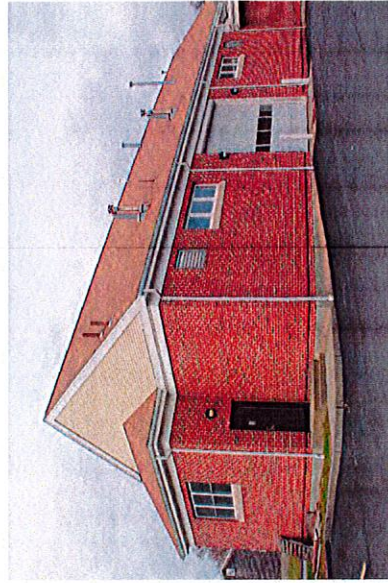


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- **School Facilities in Operable Conditions: Plan for Future Rehabilitation or Maintenance**
 - School Administration Hastings Middle School
 - Tripp School High School – 1906 Portion
- **School Facilities Recently Renovated**
 - East Fairhaven Elementary Leroy Wood Elementary
 - High School - Addition



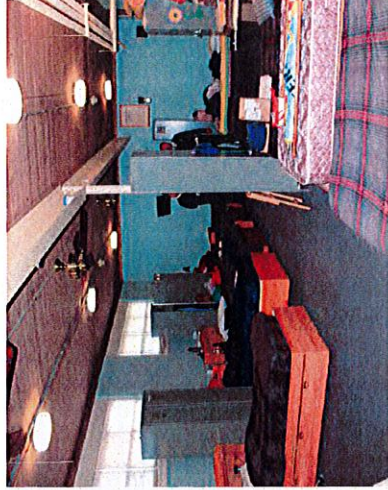
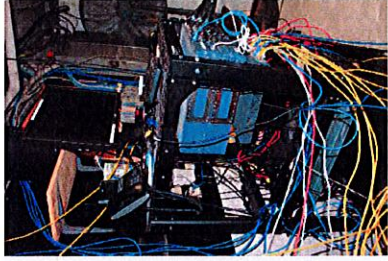
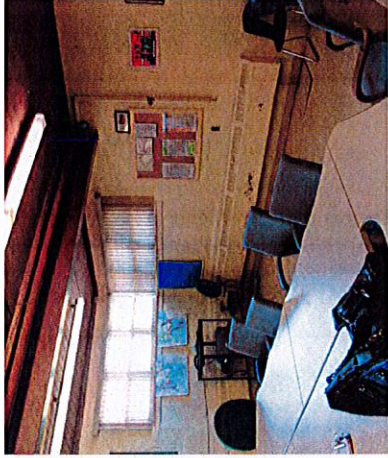
MASTER PLANNING PROCESS: PUBLIC SAFETY



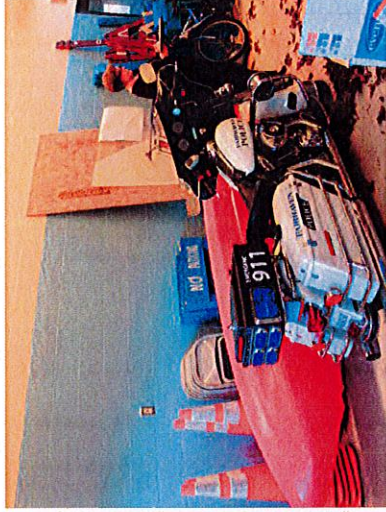
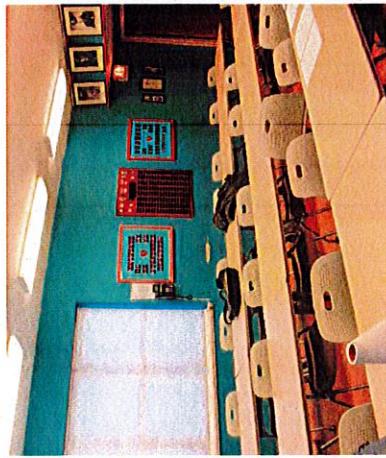
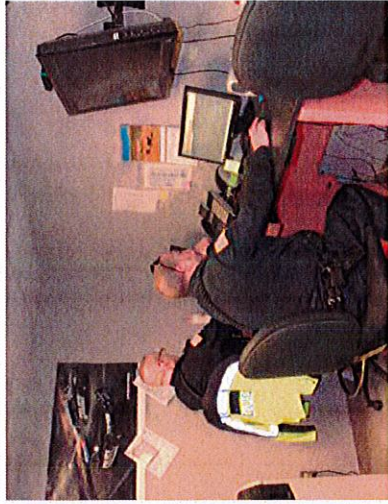
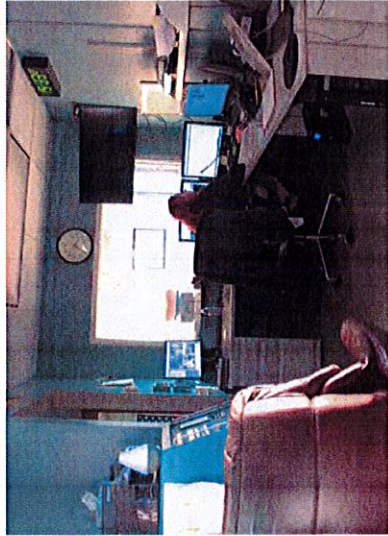
PUBLIC FACILITIES IMPROVEMENT PLAN, FAIRHAVEN MA



MASTER PLANNING PROCESS: PUBLIC SAFETY – FIRE DEPARTMENT INTERIORS



MASTER PLANNING PROCESS: PUBLIC SAFETY – POLICE DEPARTMENT INTERIORS



MASTER PLANNING PROCESS: PUBLIC SAFETY – ARCHITECTURAL EXISTING CONDITIONS

- **Exterior Envelope:**
 - Brick in excellent condition.
 - Some rotting of wood trim; soffits in good condition.
 - Insulation in additions is indicated; original building unknown.
 - Some rusting of lintels and HM doors at grade.
 - Stairs/ramp at PD entry show signs of settling; expansion joint deteriorating; lack of flashings.
- **Interior Finishes:**
 - Latest addition in very good condition.
 - Finishes in existing building in good to fair condition; some ponding of floors and stained ceilings indicate issues.
 - Some flooding in PD basement.
 - Some non-compliant hardware, service counters and stair/railing assemblies.
 - Spaces are generally too small to fit current programmatic needs.



MASTER PLANNING PROCESS: PUBLIC SAFETY – CIVIL EXISTING CONDITIONS

- Significant elevation change at FD access between the overhead door + Washington Street. **Slopes ranged from 10.5% to 12%**. It is tough to back the trucks in and they often slip on the slope.
- **Parking lots:** The number of marked accessible parking spaces (1) does not comply with the minimum required per ADA (3) at FD parking lot. The number of marked accessible parking spaces at the PD (1) complies with the minimum required per ADA (one). No marked accessible van parking spaces.
- **Slope of ADA parking space** at the PD (4.3%) did not meet ADA requirements. (2% maximum).
- The **slope of both accessible routes** to each building entrance were not compliant with ADA regulations. (9% at Police Station, 6.8% at Fire Station).
- Repave and restripe Fire Station parking lot. Regrade accessible parking spot at Fire Station. Regrade accessible route to Fire and Police Stations. Provide two additional accessible parking spaces in the Fire Station parking lot. One of the spaces shall be for accessible van parking.
- Assess quantity of runoff from roof, capacity of gutter system, and stormwater management system capacity at Police Station roof. Repair roof drain collection system.
- Investigate and repair sewer connection between Washington Street and Fire Station.



MASTER PLANNING PROCESS: PUBLIC SAFETY - STRUCTURAL EXISTING CONDITIONS

- **Superstructure** in generally sound condition
- Some **shrinkage cracking** noted at FD slab on grades; does not appear indicative of active movement and shrinkage does not affect the structural integrity of slab. Areas of cracking and spalling were observed along the Fire Apparatus Bay approach apron at the building's exterior. A **crack was observed in the PD elevated first floor slab within the evidence room.**
- **Basement area** of the original PD gets **water infiltration/standing water** approximately once per year. Based on discussions, facility personnel believes this is caused by **poor drainage** around the building and an undersized drainage discharge system.
- **Water staining** was observed along ceiling tiles in the original PD under the flat roof area. Roof was recently replaced in 2014-2015 and **evidence of leaks are still occasionally observed.**
- **Windows** along the southwest side of the original police station are out-of-plumb and allow air infiltration. The header above the windows appeared to generally be plumb.



MASTER PLANNING PROCESS: PUBLIC SAFETY - STRUCTURAL EXISTING CONDITIONS

- Drainage improvements should be investigated around the original Police Station building.
- Concrete **spalls and cracks should be repaired with patching mortar and epoxy crack injection**. The crack within the original PD elevated first floor slab (in evidence room) is less than 1/16" in width and **should be monitored**. If the crack widens, it should be routed and filled with epoxy.
- The **integrity of the original PD roof membrane and window blocking** should be further investigated for soundness and repaired/replaced as necessary.
- **Load-bearing and partition walls within the original building** are constructed with stack bond masonry and support a timber plank roof (considered a flexible diaphragm). It is unclear if these CMU walls are unreinforced, but given the age of the original building they **are likely either unreinforced or only lightly reinforced**. Any significant alteration of the building, it should be assumed that the attachment of the walls to the existing roof framing will need to be evaluated for code-prescribed seismic loads and upgraded as necessary. Connections may require some level of retrofit including, but not necessarily limited to installation of new ledger boards, new anchor rods, and strapping. Note that a "significant alteration" (i.e. Level 3 alteration) is defined by the Massachusetts Existing Building Code as renovations/alterations where the "work area" exceeds 50% of the aggregate area of the building.



MASTER PLANNING PROCESS: PUBLIC SAFETY – MECHANICAL EXISTING CONDITIONS

- **FD:** Hot water heating system + related components has surpassed its expected service life and appears to be in fair/poor condition. Split DX system serving the dispatch area is beyond its expected service life and appears to be in fair/poor condition. Apparatus bay heating + exhaust equipment has surpassed its expected service life and appears to be in fair/poor condition. The de-stratification fans have surpassed their expected service life and appear to be in poor condition. The EMS Apparatus bay and Drive bay exhaust systems were reported as broken/ inoperable and require replacement.
- **PD:** Roof-mounted exhaust fans + packaged air handling units appear to have been installed somewhat recently and seem to be in good condition. Indoor air-handling units + split DX cooling components appear to be in fair condition but have surpassed their expected service lives.
- In general, the HVAC systems require replacement and upgrading throughout for code compliance and thermal comfort.
- **Replace failed apparatus bay exhaust fans and install a gas detection system to control operation of the vehicle-parking area exhaust systems, as a minimum.**
- Recommendation would be a full HVAC system re-design for greater efficiency, zone control, thermal comfort, and air quality.



MASTER PLANNING PROCESS: PUBLIC SAFETY – ELECTRICAL EXISTING CONDITIONS

- **Electrical service is undersized** at 8.6W/SF; not adequate for a substantial renovation or addition. The generator is undersized at 3.6W/SF and is beyond its serviceable life.
- Metal clad cable and pipe/wire; Fair to Poor Condition.
- Sub-Panels: Located in closets + Janitors Closets. Electric Closets are used for storage.
- **Branch circuit panel boards are fair to poor**; original vintage in the FD are beyond serviceable life.
- Fluorescent strips, recessed troffers and sconces. **Lighting is in poor condition.**
- Receptacles: Quantity and location is fair. New outlets have been added where needed for specific equipment. GFI protection is compliant. No arch fault protection is provided in the dorms.
- **Emergency Lighting:** Non-code compliant; utilizes a single transfer switch, no separation of Life Safety and optional stand-by.
- **Fire Alarm System low frequency horns are not installed in the dorms as well as C.O. detectors in the dorms.**
- Arch fault breakers are not installed in the dorms.
- **Under any substantial renovation or addition program, all Electrical systems shall be upgraded.**



MASTER PLANNING PROCESS: PUBLIC SAFETY – PLUMBING EXISTING CONDITIONS

- Toilet Room Fixtures are in fair condition. Men's and Women's Locker Rooms are provided with showers. Kitchen sinks are counter mounted, single bowl stainless steel, with gooseneck faucets. Mop receptors are floor mounted slop sinks. Faucets are equipped with vacuum breakers.
- **Building is not protected with an automatic sprinkler system.**
- Floor drain not provided in Sallyport Garage.
- **Replace existing plumbing fixtures with new accessible water conserving type fixtures. Replace antiquated shutoff valves on domestic water system. Provide drinking fountain.**
- **Provide floor drain in Sallyport garage and connect to existing oil separator.**
- A sprinkler system would be required if a building addition is constructed or if major renovations are provided for the existing building. **A dedicated fire service from the municipal water supply system would be required. Service would include backflow preventer and sprinkler alarm valve.** A hydrant flow test is required to confirm the Municipal water supply capacity.



MASTER PLANNING PROCESS: PUBLIC SAFETY

- Current Facility: 21,880 GSF including basement occupied and storage space, first floor and occupied and unfinished second floor.
- Site: 24 hours / 7 days per week.
 - Visitor and employee parking is inadequate with no obvious separation of visitors and department vehicles or overlapping shifts for both departments.
 - Some department vehicles are parked outdoors.
 - Dumpster.
 - Emergency generator.
 - Training Tower.
- Movement of emergency vehicles: Fire and Police Vehicles must be able to move quickly and effortlessly from site.



MASTER PLANNING PROCESS: PUBLIC SAFETY

- **Fire Department Observations:**
 - Current building is undersized for current personnel, vehicles and equipment.
 - Apparatus if filled to capacity; some vehicles must be stored off site.
 - Lack of rooms for support equipment such as gear and decontamination areas.
 - Organization of spaces does not reflect current fire operational needs: FD responds to ambulance calls passes thru PD meeting room.
 - Lack of appropriate office, meeting and work space as well as storage and file rooms.
 - Personnel living spaces are at capacity and not sized for current staff.



MASTER PLANNING PROCESS: PUBLIC SAFETY

- **Police Department Observations:**
 - Current building is undersized for current personnel, vehicles and equipment.
 - Current facility cannot provide workspace for any associated personnel such as Animal Control, Emergency Management, or outside agency personnel such as crisis and domestic violence personnel, district attorney or clinicians.
 - Lack of appropriate office, meeting and work space as well as storage and file rooms.
 - No holding area; booking area too small and too much prisoner access to personnel and equipment; No cell block.
 - The building lacks appropriately sized spaces such as a dedicated roll call room, Fire Arms/Fingerprinting/Sex Offenders Registration room, locker rooms, report writing areas, workspaces for specialized officers and patrol supplies.
 - IT and mechanical spaces are limited and unsecured.
 - The department has specialized spaces that require surveillance and security such as the evidence lockers and room, bulk evidence, recovered property and the armory.

MASTER PLANNING PROCESS: PUBLIC SAFETY

- Preliminary Programming Needs at Police + Fire: 46,533 SF

DIVISION	GSF	TOTAL GSF
PD + FD Shared	7,951	
SUBTOTAL		7,951
PD: Administration	3,531	
PD: Operations	3,485	
PD: Support	3,256	
PD: Operations - Detention	3,554	
SUBTOTAL		13,824
FD: Administration	2,639	
FD: Staff Support	4,995	
FD: Operations	17,123	
SUBTOTAL		24,758
TOTAL		46,533