

Hampden Town Hall Capital Improvement And Accessibility Study



May 22, 2017

Prepared by:



MAROIS CONSTRUCTION CO. INC.

262 OLD LYMAN RD.
SOUTH HADLEY, MA 01075
PHONE: 413-533-1320
FAX: 532-1149

Consultants:

ArchitectureEL
Environment Life Inc.

Table of Contents

Introduction	2
Consideration of existing conditions	3
Accessibility	6
<i>Ramps</i>	6
<i>Handrails and Stairways</i>	9
<i>Conveyance</i>	12
<i>Doors and Hardware</i>	13
<i>Furnishings and equipment</i>	15
Fire Protection	19
Code Compliance Upgrades Summary Costs Chart.....	20
Former Police Station Office Conversion	21
Office Conversion Summary Chart	24
Maintenance and Repairs	25
<i>Maintenance and Repair Summary Chart</i>	30
Appendix A: Cost Breakdown	31

Appendix B: Existing Plans and Proposed Upgrades



Introduction

The subject building is located at 625 Main Street in Hampden, Massachusetts. Originally constructed in 1932, the building currently operates as the Town Hall and Library and facilitates the needs of a population of approximately 5000 residents.

This report looks at existing conditions of the Town Hall while noting code compliance deficiencies, highlighting deferred maintenance items; and producing a preliminary budget for upgrading the former Town Police Station area into functional office space. The report is divided into three sections to more clearly define the scope of work required in each of the aforementioned areas. It should be understood that this is a preliminary study and limited to only the items specifically mentioned in this report. Furthermore, it is understood that design development plan more specific to the buildings future needs will be required.

Please note that this report is based on inspections during site visits, no functional or destructive testing has been performed. Drawings dated 10-13-89, 10-31-16, and 3-14-17 have also served as a reference. The report that follows is preliminary in nature and intended for informational purposes only. Consequently, the content of this report is subject to further design development and engineering beyond the scope of this review.

Prior to undertaking any work on the building, testing for hazardous (asbestos) containing material will need to be performed by a certified professional to determine the scope of any abatement work required. Until such time as this testing is conducted, the cost of abatement cannot be properly quantified and therefore is not considered in this report.



Considerations of Existing Conditions

1. Applicable Massachusetts Building Codes:

<u>Code Type</u>	<u>Applicable Code (Model Code Basis)</u>
Building	780 CMR: MA State Building Code <ul style="list-style-type: none"> • Amended 2015 International Building Code (IBC) • Amended 2015 International Existing Building Code (IEBC)
Fire Prevention	527 CMR: MA Fire Prevention Regulations (2012 NFPA 1)
Accessibility	521 CMR: Architectural Access Board (ADA)
Electrical	527 R 12:00 MA Building Code Amended 2017 National Electrical Code
Elevators	524 CMR MA Elevator Code <ul style="list-style-type: none"> • Amended 2004 ASME A17.1
Mechanical	2015 International Mechanical Code (IMC)
Plumbing	248 CMR: MA Plumbing Code
Energy Conservation	2015 International Energy Conservation Code & Stretch Energy Code

The 9th edition of 780 CMR based on the 2015 International Code is expected to go into effect in 2017. Be advised, the above referenced codes may be subject to revision

2. Accessibility for Persons with Disabilities

Alterations to the building must comply with the requirements of the Massachusetts Architectural; Access Board Regulations (521 CMR).

For alterations of existing building the requirements of 521 CMR are based on the cost of the proposed work:

- A. The Town of Hampden Assessors Office lists the value of this 17,571 square foot building at \$1,160,000.00
- B. If the cost of the proposed work is less than \$100,000.00, then only the new work must comply.
- C. If the cost of the proposed work is greater than \$100,000.00 then all new work must comply and the existing building must include an accessible public entrance, toilet

room, telephone, and drinking fountain (if public phones and drinking fountains are provided) (521 CMR Section 3.3.1(b)).

- D. There is an exemption for exterior maintenance work which includes roof repair or replacement, window repair or replacement, and masonry repair work if the cost of is less than \$500,000.00.
- E. If the cost of the proposed work is greater than 30% of the full and fair cash value of the existing building (\$348,210.00), the entire building is required to comply with 521 CMR. There is no exempt work. The aggregate project costs over any three year period apply to determining the 30% criteria.

If the work to be performed is major in scope all portions of the building open to the general public (visitors, etc.) must be upgraded to comply in full with the current requirements of 521 CMR. Any employee-only areas such as staff lounges, staff bathrooms, and staff work areas are not required to comply with the 521 CMR, as long as the general public access is not permitted. It should be noted that the Access Board expects to extend their jurisdiction to employee areas. Upgrades required to meet full compliance with the provisions of 521 CMR include the following building features:

- **All entrances for public use** must be accessible (521 CMR 25.1)
- Accessible routes throughout the building (521 CMR 20.1)
- Vertical access to all floor levels (521 CMR 28.1)
- Service counters (521 CMR 7.2.2)
- Accessible toilet rooms (521 CMR 30)
- Where tables, study carrels, computer workstations or fixed seating is provided at least 5% with a minimum of one of each item must be accessible (521 CCMR Section 12.2.2)
- Any part of an accessible route with a slope greater than 1:20 (5%) shall be considered a ramp and shall comply with the requirements for ramps (521 CMR 24.00). The maximum slope of a ramp cannot exceed 1:12 (8.3%) in accordance with 521 CMR 24.2.1 and handrails need to be provided in accordance with 521 CMR 24.5
- Signage and room tags need to comply with character proportion, height raised, brailled characters and pictorial symbol sign requirements (521 CMR 41.3, 41.4, 41.5)
- Drinking fountains shall comply with the requirements of 521 CMR 36.00 Drinking Fountains (521 CMR 12.5)
- Accessible parking spaces must be provided based on the total number of parking spaces (521 CMR 8.3 & 23.2.1). Additionally, one in every 8 accessible parking spaces, but not less than one, must be van accessible (521 CMR 23.2.2).

Americans with Disabilities Act Guidelines

Required compliance with the ADA Guidelines is triggered by renovations to the existing building. All renovations to the building must be made to ensure that, to the maximum extent feasible the altered portions of the facility are readily accessible to and usable by individuals with disabilities (28 CFR Part 36 Section 36.402 (a)). Alterations made to provide an accessible path of travel to altered areas and accessible facilities (i.e. provide accessible toilet facilities) are not required if the cost exceeds 20% of the total cost of the alteration (28 CFR Part 36 Section 36.403 (f)). However, if the cost to meet these accessibility requirements does not exceed 20%, alterations are still required to the maximum extent that the area can be made accessible without exceeding the 20% criteria (28 CFR Part 36 Section 36.403(g)). The ADA also contains less stringent dimensional requirement for some building elements in an existing building where it is infeasible to meet the requirements for new construction. (ADA Section 4.1.6) *Even if compliance with accessibility requirements for a particular element of the building cannot be achieved per 4.1.6; the work still must comply with the MA State Building Code.*

- Modification/addition of Accessible entrances, exits, ramps, handrails, door openings, accessible routes, elevator etc. would be required as part of major renovation work on the Town Hall building.

3. Required Systems

The following are potentially required by the International Existing Building Code (IEBC) if the building is renovated:

- Automatic Sprinkler System (IEBC 804.2; MGL Ch. 148 s. 26G)
- Fire Alarm System (IEBC 804.4.1, 904.2 and 904.2.2). Existing previously approved fire alarm system are allowed to remain (IEBC 804.4.1 Exception 1)

It is our understanding that the building is not furnished with a sprinkler system. Code requirements generally require that a new fire suppression system will need to be installed at the time [major] renovations take place. Please refer to page 19 for additional information regarding this requirement.



Accessibility

RAMPS:

- Front Entrance

The handicap ramp located at the front of the building is not compliant with current code. The running slope of the ramp and the handrails do not meet code requirements as defined by CMR 521. The concrete structure is deteriorating as well.



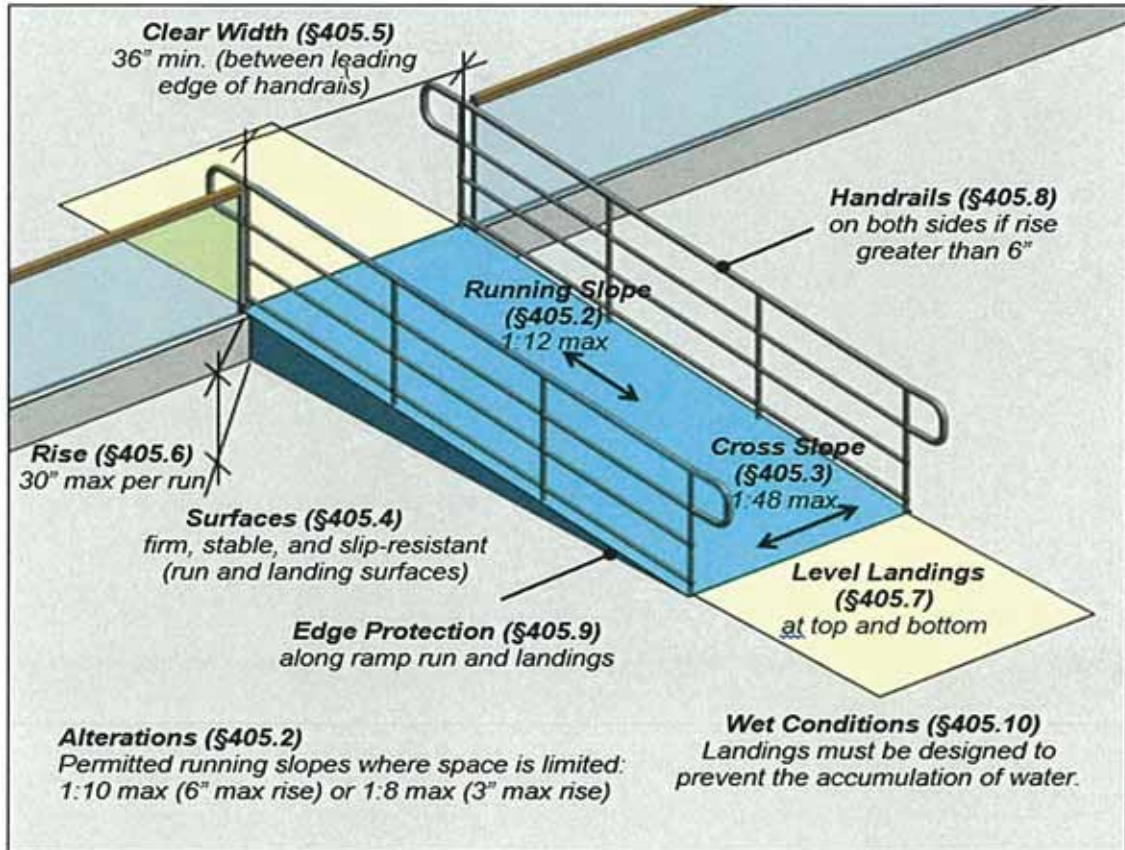
- Rear Entrance

The existing step and handrails at the rear entrance adjacent to parking lot are not compliant. The suggested correction is a regrade of this entry walk to eliminate the step.



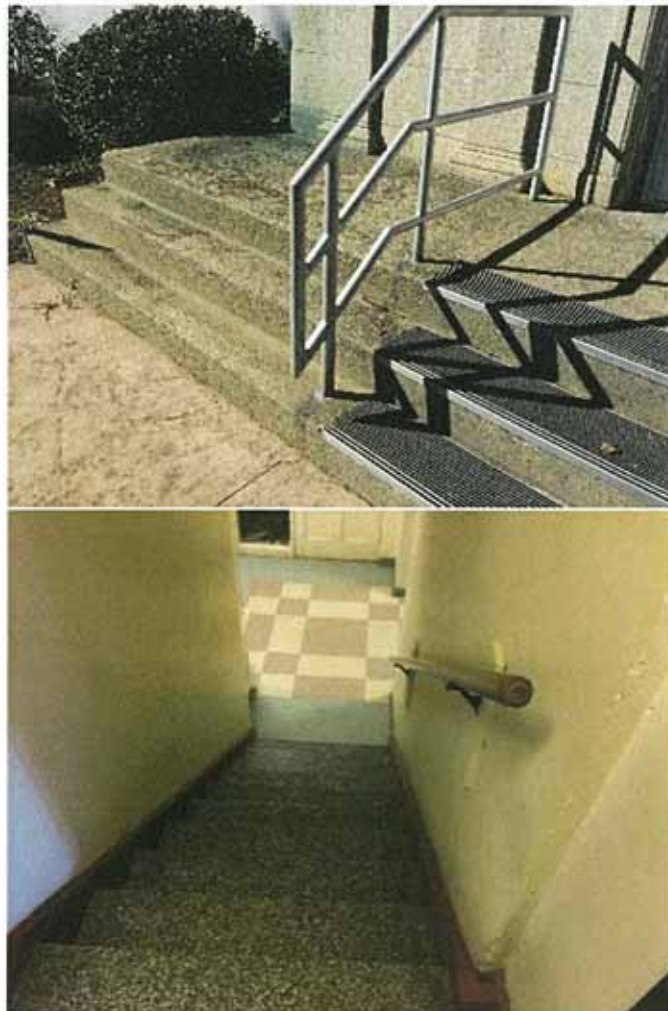
- COMPLIANT RAMPS

FIGURE 1: MA CODE REQUIRES 48" CLEAR WIDTH BETWEEN HANDRAILS



HANDRAILS and Stairways:

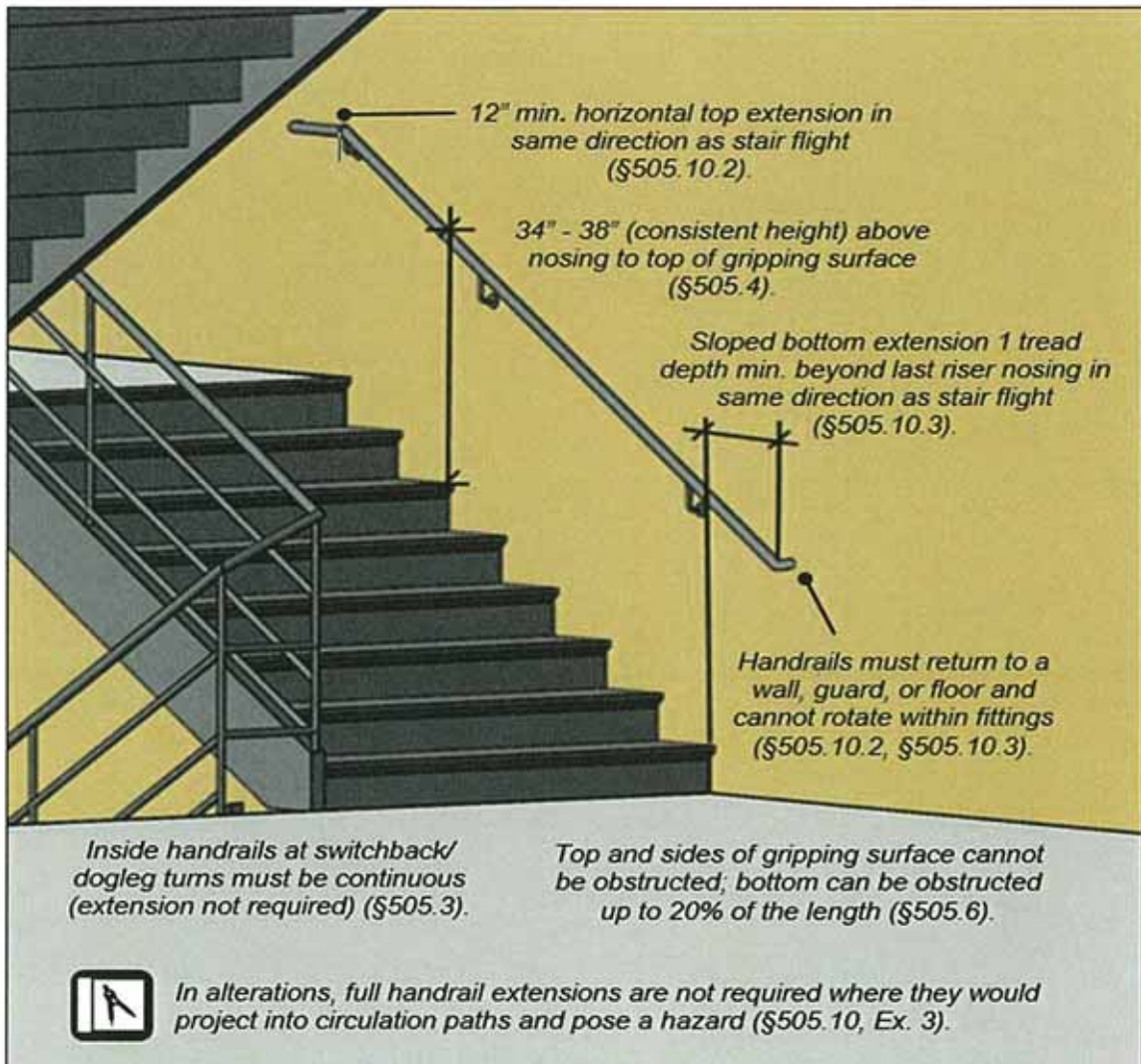
The handrails in stairways throughout the building are not code compliant and will need to be modified or replaced to comply with standards specified in 521 CMR 27.



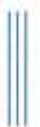
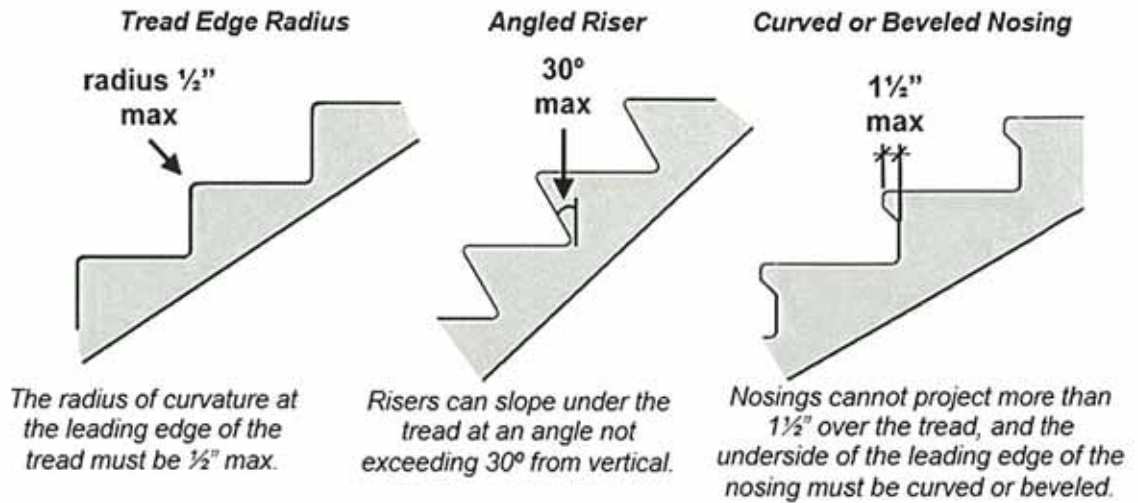
Where handrails terminate at the top and bottom of a stair run, they shall have extensions that comply with the following (521 CMR 27.4.3): at the top at least 12 inches beyond the top riser and parallel with the floor and ground surface. At the bottom, extend at least 12 inches plus the width of one tread beyond the bottom riser. The handrail shall continue to slope for a distance of



the width of one tread beyond the bottom riser. The remainder of the extension shall be horizontal. Handrail grips shall be mounted between 34" and 38" above stair nosing. Handrails shall be measured vertically from the top of the gripping surface of the handrails to the stair nosing. (521 CMR 27.4.2).



In addition, existing tread nosing on stairs does not conform to 521 CMR 27.3 for angle and radius requirements.



Conveyance

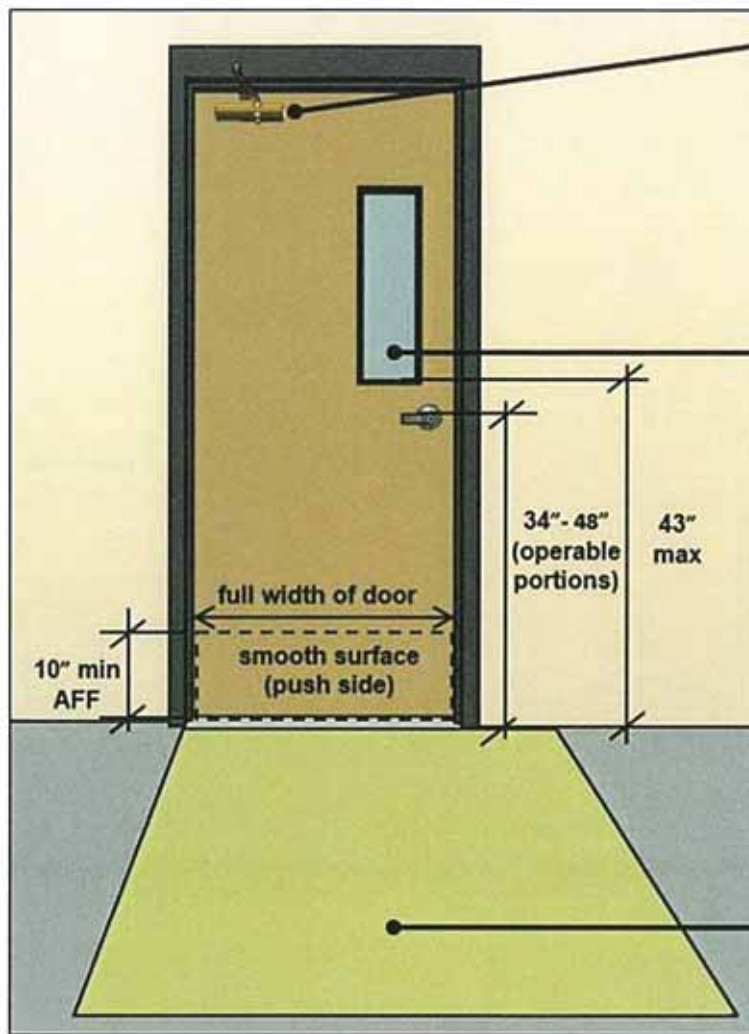
The existing handicap lifts are not an efficient means of conveyance and do not provide accessibility to significant portions of the building. The installation of an elevator is necessary to provide compliant access to the building. To comply with the AAB/ADA, elevators must be easily accessible to visitors in a public place. An elevator will not be in compliance with the ADA if it is in an inaccessible portion of a building even if it otherwise meets the required ADA dimensions therefore selection of location is critical. The design of an elevator would be performed by an Architect/engineer; typical installation conditions have been assumed for solely for budget consideration purposes.



DOORS and HARDWARE:

Most doors in the building do not meet both fire code/life safety requirements and the ADA requirements for accessibility. Specific concerns include AAB/ADA compliant handles, closers, and maneuvering clearances.





Closing Speed (§404.2.8)

Closers: 5 sec. min. from 90° to 12°
(spring hinges: 1.5 sec. min. from 70° to 0°)

Opening Force (§404.2.9)

5 lbf max.
(excluding exterior hinged doors and fire doors)

Vision/ Side Lights (if provided) (§404.2.11)

Accessible viewing height 43" max. unless not intended for viewing (i.e., lowest part above 66")

Hardware (§404.2.7)

Operable parts must comply

Smooth Surface (§404.2.10)

Required at the bottom on the push side

Thresholds (§404.2.5)

1/2" max. high
(beveled if above 1/4")

Maneuvering Clearance (§404.2.4)

required on both sides
(unless door or gate is used in one direction only)



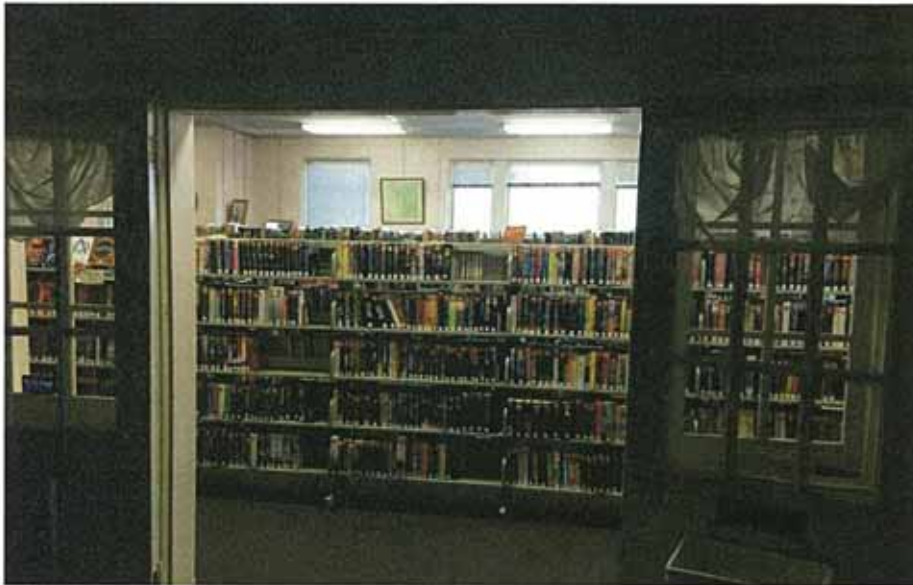
Double-Leaf Doors (§404.2.2)

One active leaf of double-leaf doors is required to meet criteria for clear width and maneuvering clearance. Other door requirements apply to both leaves.

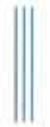
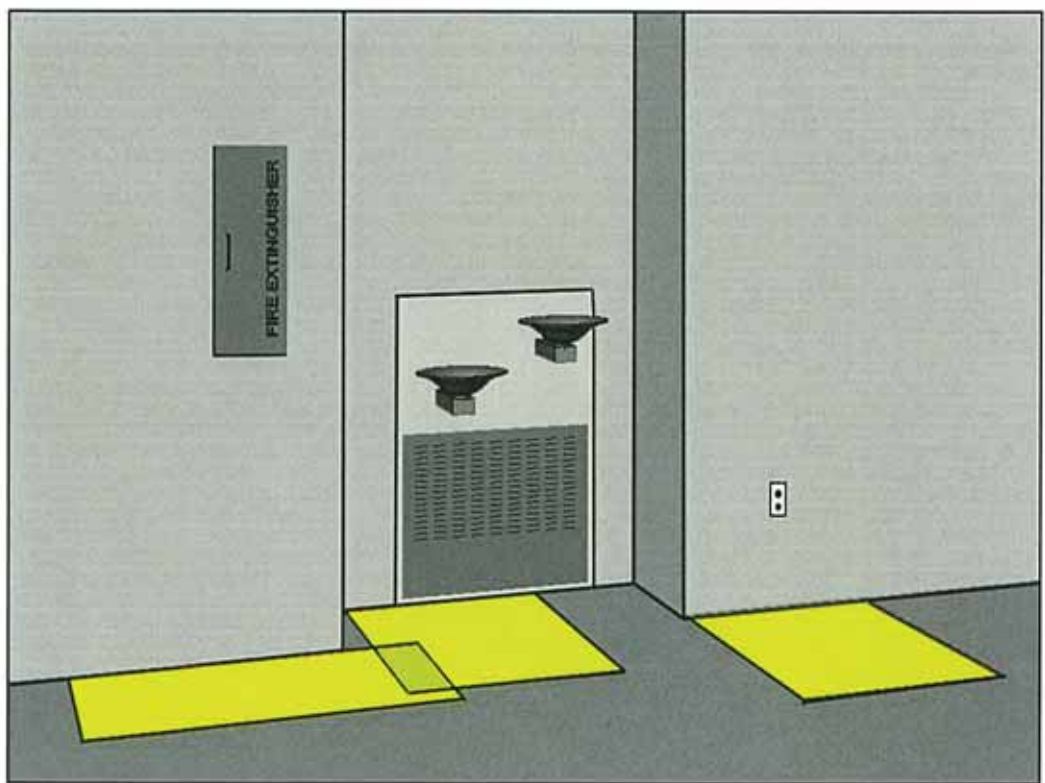
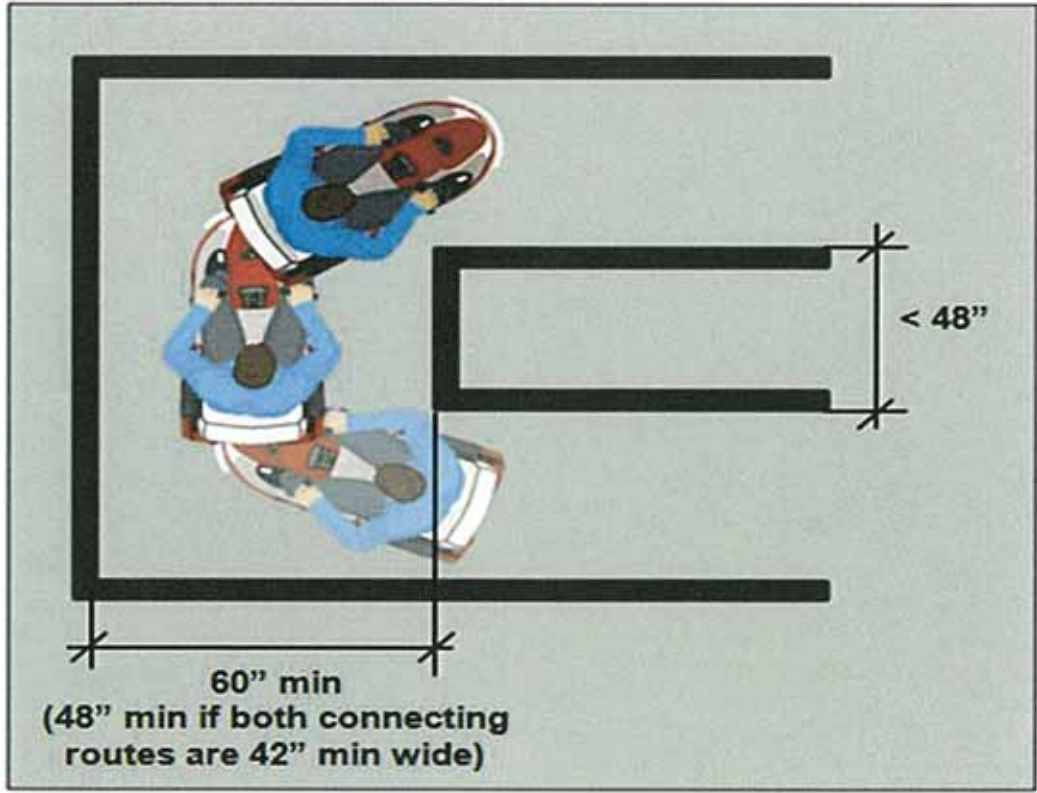


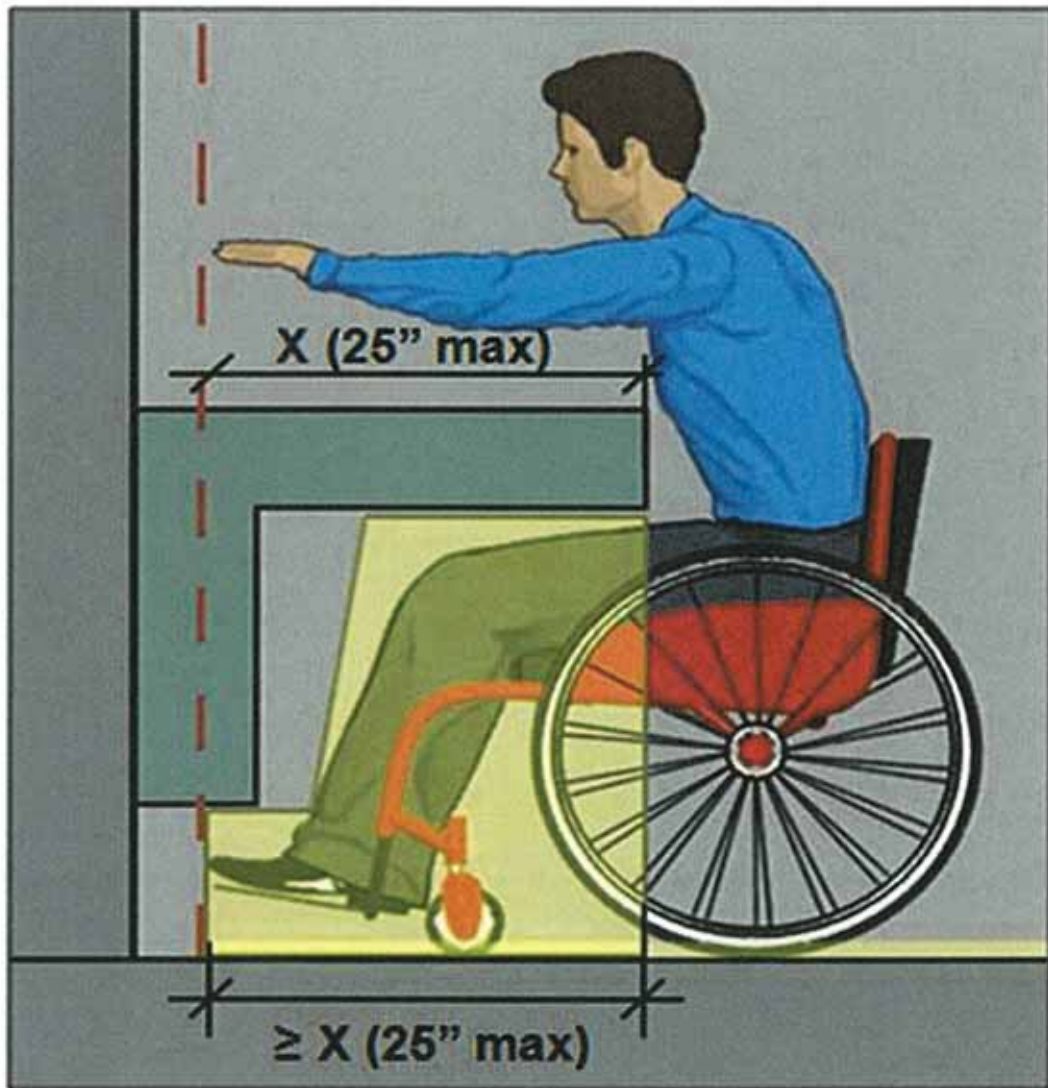
Furnishings and Equipment.

Many of the buildings current furnishings don't comply with current AAB/ADA and accessibility requirements and guidelines. The library lacks proper maneuverability clearances between book stacks; and proper height for checkout lane counters needs to comply with 521 CMR 12.2. If triggered by full compliance scope, 521CMR 14.5.1 would require assisted listening devices for the entry level of the auditorium. Under 14.5.4 signage for assisted listening would be required in the auditorium. The drinking fountains are not accessible, and there are existing countertops throughout the building that would need to be modified to comply with 521 CMR Guidelines.









Fire Protection

At the time of significant renovations to this building, an automatic sprinkler system could be required to bring the building up in compliance with NFPA13 2013 Standards. For cost estimating purposes we looked at historical data typical of similar past projects.

A design for light occupancy such as this building could include main and branch piping with seismic bracing. A single zone wet sprinkler system for the basement and first floor with a dry system in the attic is typical for similar buildings. The sprinkler system would require the installation of an underground storage tank and a fire pump to accommodate the water flow capacity since municipal water source is not available.

Engineering, design, and approval by those officials having jurisdictional authority would need to be considered to determine final design of the fire suppression system. MGL Ch. 146 Sec.26G allows for an exemption to the sprinkler requirement where "sufficient water and water pressure [does not] exist". There may be the potential for an exemption based on the absence of town water at the site. Any application for a waiver would require thorough review and approval by an engineer, as well as officials at the local and potentially state level.



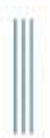
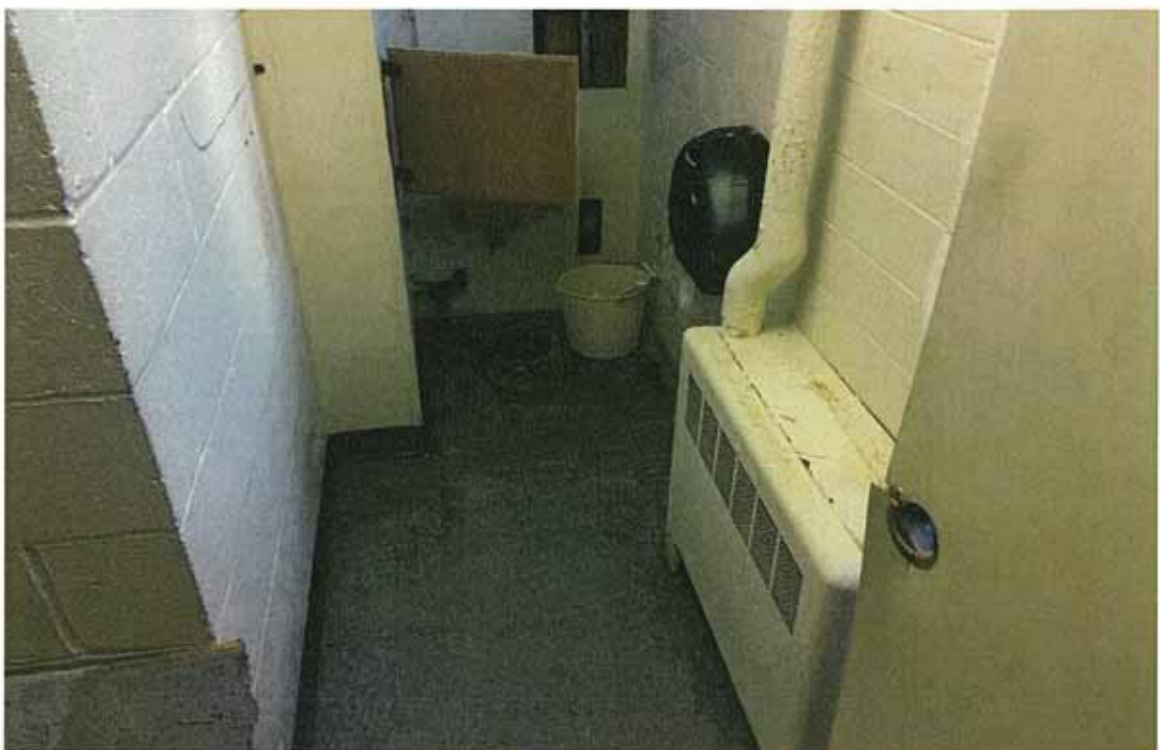
Deficiency	Proposed Resolution	Cost range	Estimated Cost
Front Handicap Ramp deterioration and non-compliant handrails	The ramp must be rebuilt to not exceed the maximum 8.3% slope and furnished with compliant handrails	\$58,000-68,000	\$ 63,000.00
Rear Entrance not Accessible	Regrade at rear entrance to eliminate step. Replace handrail	\$6,000-10,000	\$ 8,000.00
Elevator needed to provide adequate access to all floors	Install typical ADA Elevator Electrical upgrades to meet power requirement	\$255,000-275,000	\$265,000.00
Stair treads/risers/handrails do not meet accessibility standards	Modify existing treads Replace/extend handrails to meet current standards	\$24,000-32,000	\$ 28,000.00
Doors and hardware not accessible and/or fire rated	Install ADA compliant hardware, replace slabs and/or frames to as needed	\$50,000-70,000	\$60,000.00
Signage not ADA compliant	Replace with raised brail characters, pictorial symbols as required (521 CMR41)	\$3,000-5,000	\$ 4,000.00
Lack of Automatic Sprinkler System	Install typical "Light Hazard Occupancy" system meeting NFPA13 Standard	Typical Value Given	\$189,000.00
Totals for Code Compliance Upgrades	Typical for this type of application	\$585,000-649,000	\$617,000.00



Conversion of Former Police Station Area

The Hamden Police Department formerly occupied a portion of the basement level of the Town Hall building. This space is located in the South East corner of the building and includes a jail cell, bathrooms, multiple offices, a kitchen, and reception desk area. The plan is to repurpose this portion of the building as general office space. The scope of work will include demolition of the holding cell and existing partition walls. The proposed design for this space includes three new offices that open directly to the main corridor, one of which would hold the access to the proposed IT closet. An additional office space and a meeting room would open to a secondary corridor that would also serve the two new accessible restrooms. This space would receive new heat and air conditioning via two new ductless mini split units. This entire portion of the building would receive new flooring and new acoustical ceiling tile.







The proposed design for this space includes three new offices that open directly to the main corridor, one of which would hold the access to the proposed IT closet. An additional office space and a meeting room would open to a secondary corridor that would also serve the two new accessible restrooms.

Major Component of Renovation Project	Description	Estimated Cost
Interior Demolition	Remove and Dispose of walls, floor coverings, ceilings	\$14,847.00
Partitioning of the new offices	New metal stud framing, w/ sound batt insulation and drywall	\$22,625.00
Doors	Doors, frames, and hardware	\$9,900.00
Finishes- ceiling, flooring, paint	Acoustic ceiling tile, carpet tile, and LVT flooring, baseboard, paint	\$30,330.00
Electrical	Typical cost for wiring, receptacles and fixtures.	\$16,500.00
Plumbing	Cap floor drain in cell, Rough-in and fixtures for new restrooms.	\$17,600.00
HVAC	Install 2 mini split units to serve the heating and cooling of this space; 7 heads total	\$27,500.00
Totals	Average Cost Typical for this project type	\$139,302.00



Maintenance and Exterior Repairs

The exterior of the Town Hall building is in need of maintenance and repairs that if postponed could lead to significantly costlier issues in the future. Also, there is a glazed block located in corridor adjacent to auditorium area that seems to have some structural damage. Due to overlap in trades, and equipment needed for these repairs and the other proposed work, it would be beneficial to perform these repairs simultaneously to limit both costs and disruption to building occupants

Exterior cornice trim is in need of prep work and paint to prevent further decay.



Exterior masonry and Façade are need of cleaning and repointing work to maintain integrity of building envelope and to prevent further deterioration.



This shows the interior wall that needs partial demo and rebuilding to fix the underlying structure.



Apparent water infiltration of the building envelope has caused the accumulation of moisture in this wall cavity. The lack of sufficient insulation further subjects this cavity to freeze/thaw cycles that have combined to cause the glazed tile adhesive mortar to fail. Further repairs to the building envelope and additional insulation would be required to prevent reoccurrence. As we have noted moisture intrusion in the building, the age of the roofs should be verified to determine what the remainder of their life expectancy is.



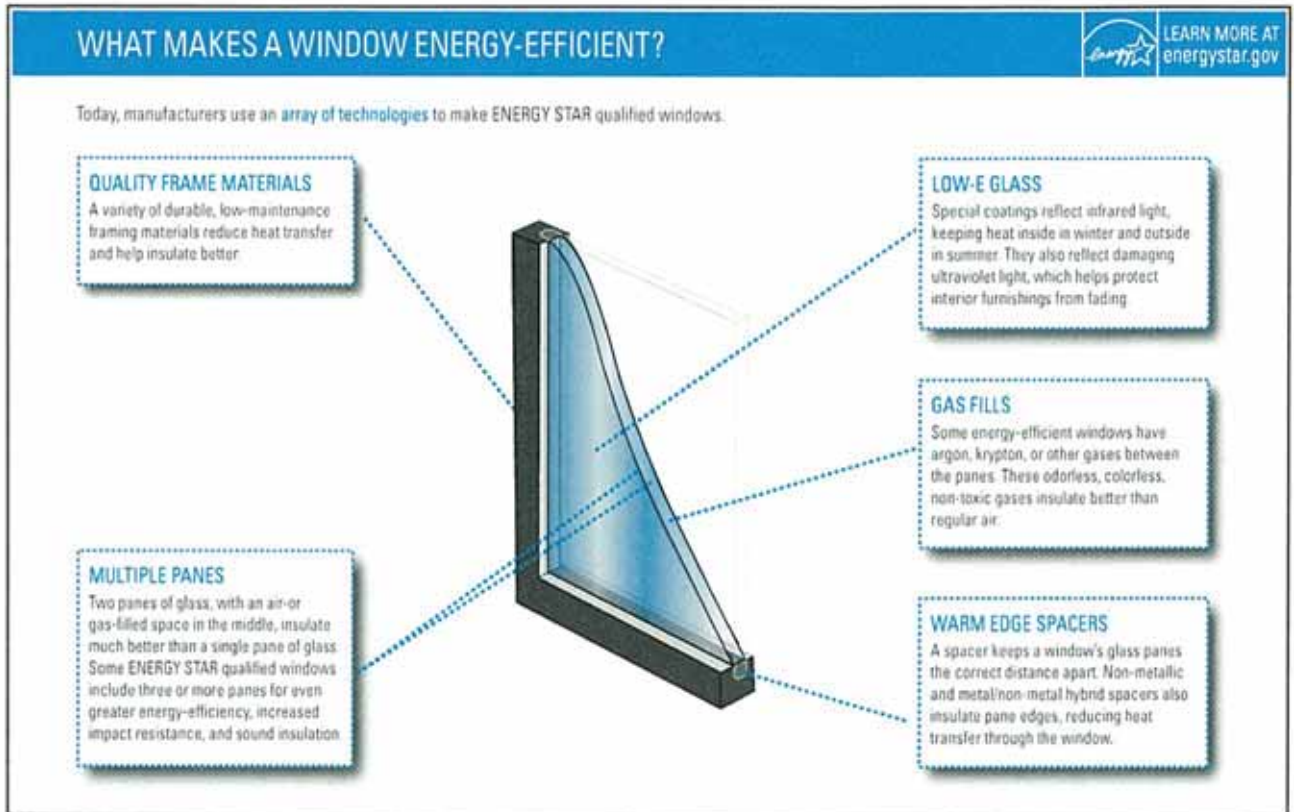


This Chimney is in need of repointing or rebuilding along with a new concrete cap to prevent further deterioration and water infiltration into the building.

The windows are old, inefficient, and in some cases are deteriorating or not functioning properly.



New windows would offer increased comfort, lower maintenance costs, and should provide energy savings.



Deficiency	Proposed Fix	Estimated Cost
Deteriorating masonry, stained façade.	Pointing, patching, repair, cleaning, and patch concrete foundation	\$23,000.00
Deteriorating Chimney	Repoint/ Rebuild chimney, install cap	\$10,000.00
Peeling Paint	Scrape and paint cornice	\$13,500.00
Old windows	Replace with new more efficient windows	\$102,000.00
Interior Glazed Block wall	Remove, salvage block, repair wall framing, reinstall block	\$5,000.00
Building envelop water infiltration (Roof)	Allowance for immediate repairs, Long-term planning needed	\$10,000.00
Total Repair Cost		\$163,500.00



Appendix A: Projected Cost Breakdown

Hampden Town Hall Preliminary Estimate for Report		
Code Compliance Upgrades		
Accessibility upgrades		
Rails for front ramps	80 LN FT	27,000.00
Demo handicap ramps front and rear	Lump Sum	10,000.00
New font & rear ramp and front steps concrete	Concrete, forms, reinforcement, finishing	34,000.00
ADA compliant signage	40 signs allowance	4,000.00
ADA Compliant Door and hardware	Approx. 30 doors	60,000.00
Stair tread retrofit and handrail extend/replace	Lump Sum Allowance	28,000.00
Elevator project		
Install typical ADA elevator	3500# split level	160,000.00
Electrical System Upgrade for Elevator	600 AMP service	35,000.00
Hoist way saw cut and remove slab	Lump Sum	4,800.00
Pit excavation by hand / YD	Conveyor out door/window	9,000.00
Selective wall demo 3 locations at hoist way	80 LN FT	13,360.00
Hoist way deck openings	Inc. temp shoring 3 loc.	23,400.00
Cutting and patching for trade work	Lump Sum / Floor	10,000.00
Hoist way Concrete slab with sump pit / YD	Reinforced 5 YDS	4,250.00
Pit Walls 12" reinforced concrete	#4 Bar 16 O.C.	4,875.00
Automatic sprinkler system		
Main and branch Piping w/ seismic bracing	Typical system	125,000.00
Underground storage tank	Non-municipal water source	30,000.00
Excavation for tank	Typical system	8,000.00
Fire Pump	No Standpipe present	22,000.00
Painting of exposed piping	In finished spaces	5,000.00
Total Estimate Code Compliance		\$617,685.00

Basement Remodel of PD space		
basement demo		
***Testing Required to Evaluate for A.C.M. And other Hazards		
Demo basement holding cell	228 SQ FT wall	2,012.00
Demo Walls in basement	1350 SQ FT	6,000.00
Basement floor removal	1200 SQ Ft	3,420.00
Basement ceiling removal	1400 SQ Ft	3,415.00
Basement buildout		
basement flooring		
New resilient base	410 LN FT	1,800.00
Level basement floor in cell	76 SQ FT	1,650.00
CPT basement new	Carpet tile 81 SQ YD	4,825.00
VCT basement new	Vinyl Tile	3,790.00
Acoustical Ceiling basement	1300 SQ FT	8,630.00
Basement remodeled area new doors	Six new hollow metal doors and frames	9,900.00
metal framing/ drywall		
New metal stud wall in basement	795 SQ FT	3,500.00
Sound proofing in basement partition walls	< 1000 SQ FT	1,645.00
New drywall in new metal stud areas of basement	1590 SQ FT	17,480.00
Basement interior wall painting	3,855 SQ FT	9,635.00
HVAC former police station		

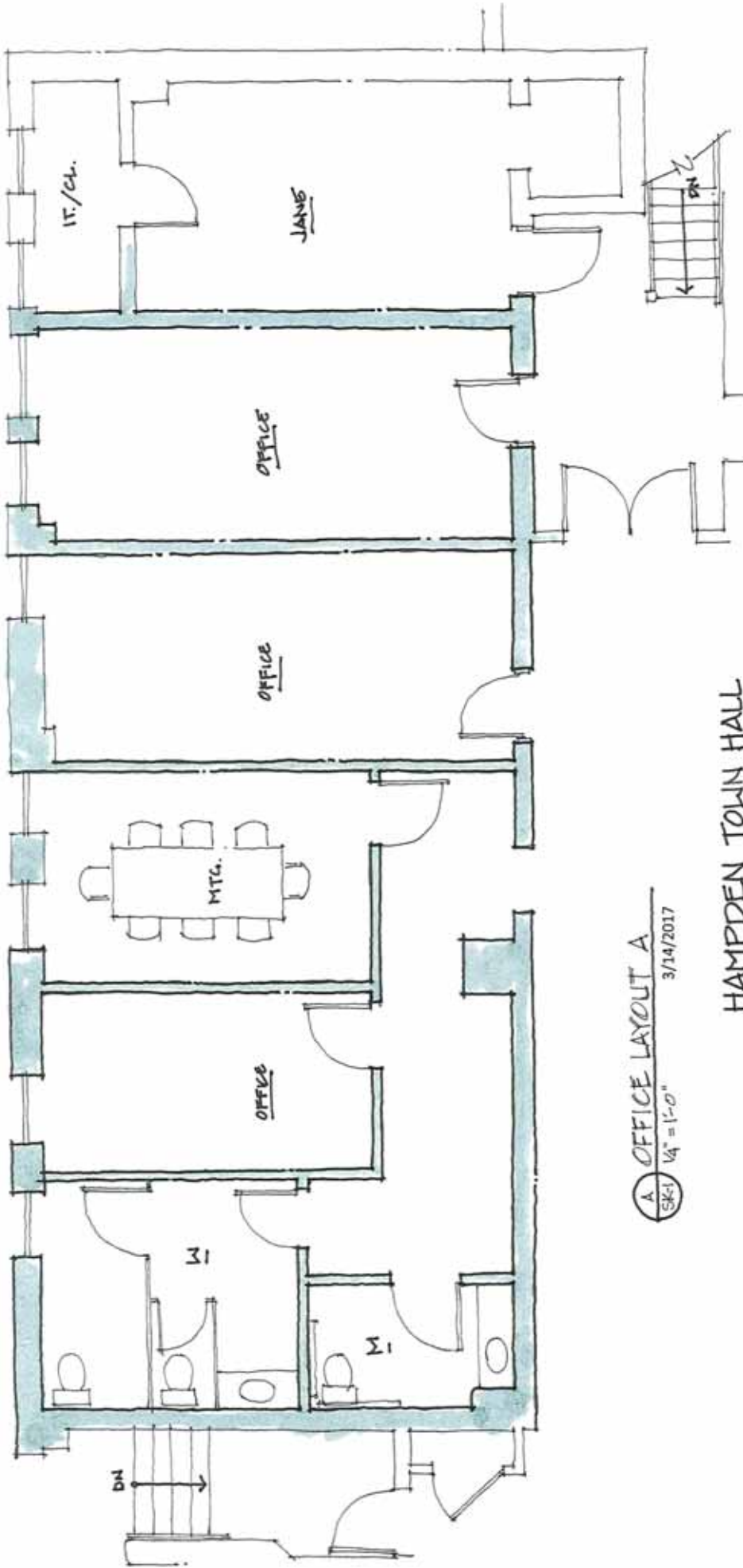


HVAC (priced by SQFT) basement remodel	1200 SQ FT	12,500.00
mini split units	2 units with 7 heads	15,000.00
Plumbing		
Remove Floor Drain	In holding cell, cap drain line	550.00
Baths in basement rough in	2 baths	11,000.00
New toilet	3	1,650.00
New sink	2	1,100.00
division 10 specialties		
Bath partition in basement remodel 20 LNFT total		3,300.00
Electrical (priced by SQFT) basement remodel	Based on typical install	16,500.00
Total Estimate Former PD Buildout		\$139,302.00
<p>* A significant Portion of the work in the conversion of the former police station is directly related to the installation of accessible bathrooms.</p>		



Maintenance and repairs		
Windows in basement	Remove and Replace (30)	45,000.00
windows 2nd floor	Remove and Replace (38)	57,000.00
Scrape and paint fascia shelf	820 LN FT	13,510.00
Masonry repair and restoration		
Chimney repair and cap	Repoint / rebuild / furnish and install new cap	10,000.00
Repair, Patch, Point existing façade	Approx. 200 SQ FT	3,000.00
Repair to interior glazed wall	Rebuild portion	5,000.00
Clean stained areas of building Façade	allowance	10,000.00
Concrete repairs at foundation	allowance	10,000.00
Roofing repairs	allowance	10,000.00
Total Estimate maintenance and repairs		\$163,510.00

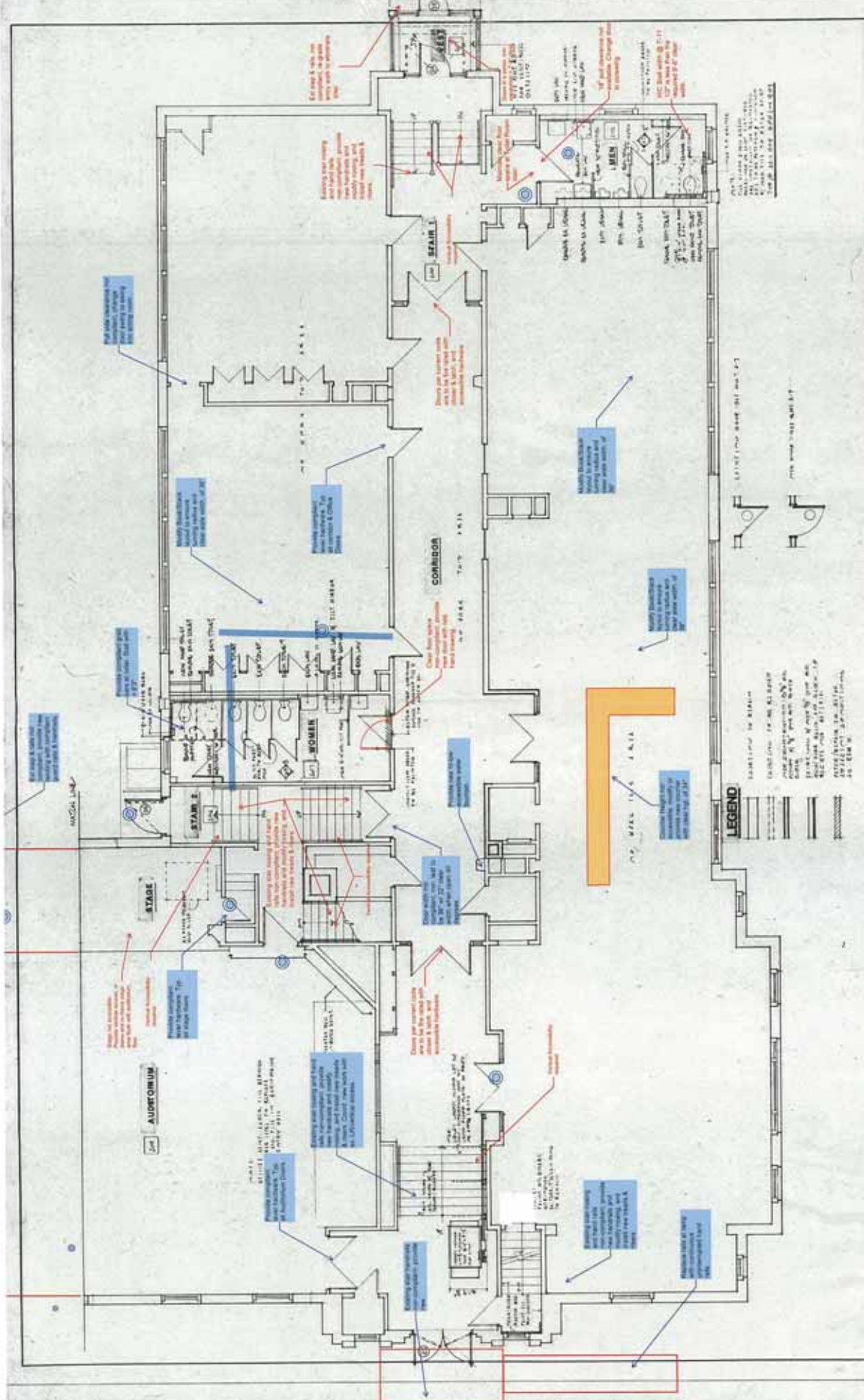




A OFFICE LAYOUT A
 SK-1 1/4" = 1'-0" 3/14/2017

HAMPDEN TOWN HALL

ArchitectureEL
 Environment Life Inc.



UPPER LEVEL

DATE 03-22-17

CARLSON & SCHMITT ARCHITECTS, INC.

REPAIRS AND RENOVATIONS TO THE HAMPDEN TOWN HOUSE

