

Summary Report

ARCHITECTURAL / ENGINEERING SERVICES NEEDHAM TOWN HALL FEASIBILITY STUDY

Permanent Public Building Committee
Needham Town Hall
Needham, Massachusetts



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Executive Summary



EXECUTIVE SUMMARY

In July 2007, the Permanent Public Building Committee issued a request for Proposals for the Town Hall feasibility study and in August selected the firm of McGinley Kalsow & Associates LLP. McGinley Kalsow & Associates LLP led a team of architects and engineers from September 2007 to March 2008 in performing a needs assessment and feasibility study for the Needham Town Hall.

Building Needs Assessment

The scope of work for this assessment included the evaluation of the historic fabric, building structure, interior space, mechanical, electrical, plumbing, fire protection and accessibility of the building. The assessment reviewed the existing uses, historical fabric and physical conditions of the Town Hall in order to determine its present and future needs. This assessment took the form of surveys, interviews, historic research, drawings and report reviews and physical examination of the building.

The assessment led to the following conclusions:

- A substantial portion of the original historic fabric is virtually intact. The historic exterior and significant interior spaces and materials should be retained.
- The integrity of the historic Town Hall building should be preserved and protected, and inappropriate changes made in 1952 reversed.
- Structural deficiencies with the exterior brick masonry should be stabilized and made safe until permanent repairs are made. (Stabilization of the masonry was completed in Fall 2007.)
- The cupola and clock needs to be repaired and restored.
- Existing and future space needs of all current occupants and restoration of the auditorium cannot be achieved within the finite area of the existing building.
- The dry sprinkler fire protection system installed in 1931 is adequate but has reached the end of its useful life. When major renovations are undertaken the sprinkler heads and piping will need to be replaced.
- The heating system consists of a steam oil-fired burner and a variety of independent local systems. The system is archaic and inefficient. The overall system is inadequate as a cohesive system and fails to provide adequate heat to all spaces without auxiliary local heaters.
- The air conditioning system is comprised of multiple window type AC units with two small commercial grade mounted units serving the MIS Department. This system is inadequate for the requirements of the spaces at the Town Hall.

- The building ventilation system, which consists mainly of operable windows, is severely inadequate and does not conform to the current building code.
- The plumbing system is adequate for the current sanitary arrangement and requirements. When the bathrooms are reconfigured and relocated, the plumbing system will need to be replaced.
- The overall condition of the electrical systems is fair with significant parts of the system in violation of the National Electrical Code and not labeled. The electrical system should be upgraded and code violations corrected.
- The lighting system is archaic and energy-inefficient. Access to switches is often impaired by office furnishings. Any renovation will require complete replacement of the lighting system for energy efficiency, cost savings and proper task lighting.
- The existing fire alarm system does not meet current codes and should be replaced.
- Emergency egress lighting is inadequate, missing from several locations and two lights are not functioning. The exit signs are absent from required locations and some are not lighted as required. The egress lighting and exit signs should be upgraded to meet the current code.

Feasibility Study

The major objective of the Town Hall Feasibility Study was to carefully identify and evaluate the alternatives that would preserve the existing historic Needham Town Hall and its setting on the historic Town Common, while meeting the space needs of a modern municipal administration building.

Design Alternatives

Three Preliminary Design Alternatives were derived from the building needs assessment. These preliminary designs were presented for review and comments to the Permanent Public Building Committee, Director of Construction and Renovation, Town and Assistant Town Managers, Board of Selectmen, Town Hall Departments, Historical Commission and the Needham Commission on Disabilities.

These Designs Alternatives were revised based on these discussions and a complete set of plans developed. It was understood that the plans for all three alternatives are preliminary designs and specific offices in each alternative are subject to revision during later design phases. Changes and refinements will be made to these plans before construction documents are produced.

These plans can be viewed under the Alternative Design Schemes section of this report. A description of each alternative follows:

Alternate One – Three-story scheme with small stair, elevator, bathroom, HVAC addition.

Alternate One maximizes use of the existing three floors for office use and conference/meeting rooms in the Town Hall. The 30 feet high volume of the auditorium, balcony and stage space is restored with original finishes and colors. Offices in the auditorium space utilize eight-foot high partitions for privacy. A small addition housing a stairway, elevator, bathrooms and HVAC equipment allows maximum use of the existing Town Hall for offices.

In this alternate, Planning & Economic Development and Park & Recreation are relocated outside of the Town Hall building. This alternate is reversible and allows for easy restoration of the second floor as an auditorium space in the future if a new addition is constructed behind the Town Hall, or if office space is acquired in neighboring buildings.

During the preliminary design, it was determined that the location of the addition on the Highland Avenue side was necessary to provide a required and well-separated means of egress for each floor, to retain the existing service entrance and access to the lower level, use the greater setback distance at the Highland Avenue side to create a larger and safer pedestrian access from the street and a greater compliance with the Needham Zoning By-law. Further, the traffic is 1½ to 2 times less (March 2008 DPW traffic counts) along Highland Avenue than Chapel Street, which implies that the Highland Avenue side is viewed less often and would provide safer pedestrian access.

Alternate Two – Four-story scheme with no addition.

Alternate Two removes the auditorium, balcony, stage and auditorium wood trusses and constructs a new steel-framed third floor and re-supports the existing roof with new beams and interior columns which transfer roof and floor loads to the ground. This removes all of the remaining original woodwork, decorative plaster, original finishes and visual volume of the historic auditorium. The second floor partitions would be completely replaced with new permanent partitions and new offices constructed on the newly framed third floor. This alternate maximizes potential office space within the existing building but completely changes the volume of space, which defines the auditorium, balcony and stage. For all practical purposes, this is a non-reversible change to the existing second floor because of the introduction of large amounts of structural framing and the removal of existing wood trusses. This plan, however, permits the incorporation of all existing departments within the Town Hall building.

Alternate Three – New three-story scheme with restoration of the auditorium and major addition.

Alternate Three restores the auditorium to its original configuration and use as an auditorium and constructs a major addition in the rear parking lot. This alternate allows for future growth of town hall functions but eliminates employee on-site parking. Because this scheme involves the greatest volume of restoration work and new construction, it is the most expensive to construct.

Stage Options

Different alternatives were discussed regarding how to handle the stage area. Alternative 1 shows two conference rooms at the stage level with a wheelchair lift to the south or left of the proscenium arch, and steps up to the right of the stage to provide access to the egress stairs. Another alternative included combining the two conference rooms into a single room to avoid any concerns regarding access to the second conference room through the first. The last alternative would remove the raised stage and construct the two conference rooms at the same level as the second floor. The proscenium arch and stage apron will remain as a façade to visually define the stage. During meetings with the PPBC it was decided that these three alternatives would be further developed, reviewed and decided upon during the schematic design phase of the project.

Project Costs

The total estimated construction and soft costs for each alternate were compared. Soft costs are not direct construction costs such as pre- and post-construction expenses, design fees, furniture and financing. Alternate 1 was the lowest at \$15,764,183, Alternate 2 was \$16,271,206 and Alternate 3 was the highest at \$20,493,117. These costs do not include temporary relocation of the offices.

The project is eligible for Community Preservation Act (CPA) funds. The estimated qualifying amounts for these funds are based on an opinion from Edwards, Angell, Palmer & Dodge LLP. Alternate 1 qualifies for the largest amount, \$14,385,817 (91%), Alternate 2 for \$7,423,737 (46%) and Alternate 3 - \$14,220,223 (69%).

Several Town Representatives, Boards and Committees reviewed and made recommendations regarding the three alternative schemes. The Town management preferred Alternate 1 as the most cost effective option that provides flexibility for future expansion and reopening of the second floor as an auditorium. The Selectman voted unanimously to endorse Alternate 1 as the option to move forward with. The Permanent Public Building Committee reaffirmed the BOS's preference and gave direction to proceed with Alternative 1. The Needham Commission on Disabilities voted that the accessible ramp to the front entrance on Garrity Way be a requirement for any proposed scheme.

Background & Existing Conditions



FEASIBILITY STUDY REVIEW

In July 2007 the Permanent Public Building Committee (PPBC) issued a Request for Proposal to architects/engineers to conduct a Feasibility Study for the renovation of the Needham Town Hall. The PPBC reviewed the formal proposals received on August 3 and interviewed four finalists in mid-August 2007. The RFP defined the program requirements for the study and that draft conceptual proposals shall be presented at a public hearing prior to completion of the final report. Based on these interviews and the established criteria, PPBC selected the firm of McGinley Kalsow & Associates LLP as the most qualified firm to undertake this feasibility study. A contract was executed and an administrative conference was held on August 28, 2007 between the PPBC representative and the architect. The goals and objectives of the study were outlined and the scope of work was reviewed.

Task I – Inventory of Existing Conditions & Space Use Analysis

The initial task of the scope of work was to develop a Work Plan and Schedule for the overall study, which was submitted to the PPBC on August 31. The project schedule called for progress workshop/reviews with the PPBC on a monthly basis. A public hearing/global workshop was anticipated during the review of alternative design schemes. All relevant background information was reviewed and evaluated. Existing plans were reviewed and an intensive effort was made to find the original 1902 plans at the local and state levels. Unfortunately, these plans could not be located. The surveys and inventory of the historic building were undertaken to determine the



*Deteriorated Masonry on East End Wall
Prior to Fall 2007 Emergency Repairs*

existing condition of the structure and its various systems. These surveys were initiated on September 4. During the existing conditions survey, it was determined that deterioration of the masonry east end wall required immediate interim repairs to prevent possible collapse of portions of the brick masonry wall. Recommendations were made by the architects/engineers and interim repairs to stabilize the wall were designed consistent with historic building standards. These were promptly carried out by the Town and completed by E.A. Colangeli Construction of Malden prior to the 2007 winter season.

Except for the east end wall, the Town Hall structure is in relatively good condition, although several exterior conditions require renovation and rehabilitation due to long-term weatherization and lack of periodic maintenance. The interior spaces on the first floor retain exceptional original historic fabric. The ca.1952 second floor offices, installed within the original auditorium, are inefficient and are incompatible with the historical character of the building. Some structural modifications have been made to the original roof trusses that are exposed above the second floor. The electrical, mechanical, plumbing and fire protection systems were also inspected and evaluated. The building ventilation is virtually non-existent with some window-type air conditioners. The oil-fired steam heating system is archaic and should be replaced. The overall condition of the electrical systems is fair and the electrical and lighting components are outmoded and will not meet the requirements for a modern town hall with the ability to provide the latest information technology and communication systems. The existing dry sprinkler system, installed in 1931, has reached its useful life and should be replaced along with alarm systems.



*Board of Selectmen Meeting Room,
Illustrating Exceptional Original
Historic Fabric Retained on 1st Floor*



*Current Appearance of 2nd Floor Offices
That Occupy the Auditorium*



*Current Appearance of Top Half of
Auditorium (Above 2nd Floor Office
Ceiling)*

Overall, all existing systems should be replaced during a substantial rehabilitation of the building to meet current and future needs of an energy-efficient and modern town hall. The building will need to comply with the current accessibility standards of the Massachusetts Architectural Access Board once the comprehensive renovation is begun.

Simultaneously with the inspection and evaluation of the building's existing conditions, the space needs inventory was undertaken to document the existing operations of all departments within the building. Questionnaires of existing and future needs were developed and then completed by each Town Hall department head. The consultants then met with each department head, reviewed this information and carefully inspected the operations of each department during September. All spaces were measured and defined and a computerized inventory was generated for all spaces in the Town Hall. The results of the existing conditions survey and the existing space needs inventory were completed and presented to the PPBC at its October 1, 2007 meeting.

Task II – Develop Space-Use Requirements, Collateral Guidelines & Definition of Preliminary Design Alternatives

The second task of the study was initiated on October 2 to develop long-term space requirements for all existing Town Hall departments along with estimates of relevant meeting rooms and various support spaces required for a modern town hall. The architects considered logical collateral guidelines in their evaluation of a space-use program that would meet the Town's goals for modern and efficient town hall. This included functions and activities, security and appearance, required sizes and numbers, technical requirements of codes, equipment, organizational requirements of location, adjacency, inter-relationships and arrangement of spaces. The results indicated a substantial space deficit within the existing structure, even with the relocation of all non-essential storage to another accessible town-owned building at an off-site location.

The consultants also examined all interior building fabric throughout the building during their survey to define 1903 original historic materials and later alterations and changes that have been made to date. They prepared floor plans that defined the Historical Evaluation of Building Fabric for all areas of the Town Hall in the following categories:

- Significant & Should Be Retained & Restored
- Significant & Can Be Sensitively Altered
- Contributing & Can Be Modified
- Non-Contributing & Can Be Altered or Removed

McGinley Kalsow & Associates LLP then proceeded with the definition of three Preliminary Design Alternatives for Town Hall. These Preliminary Alternatives consisted of the following:

ALTERNATE ONE – Three-story scheme with small stair, elevator, bathroom, HVAC addition.

Alternate One maximizes use of the existing three floors for office use and conferences rooms in the Town Hall. The offices in the former auditorium utilize eight-foot high walls for privacy and security. A small addition housing a stairway, elevator, bathrooms and HVAC equipment allows maximum use of the existing Town Hall for offices. In this alternate, Planning & Economic Development and Park & Recreation are relocated outside of the Town Hall building. This alternate is reversible and allows for easy restoration of the second floor as an auditorium space in the future if a new addition is constructed behind the Town Hall, or if office space is acquired in neighboring buildings.

ALTERNATE TWO – Four-story scheme with no addition.

Alternate Two removes the auditorium, balcony, stage and auditorium wood trusses and constructs a new steel-framed third floor level with new interior columns transferring roof and floor loads to the ground. The second floor partitions would be completely replaced with new permanent partitions and new offices constructed on the newly framed third floor. This alternate maximizes potential office space within the existing building but completely changes the volume of space, which defines the auditorium balcony and stage. For all practical purposes, this is a non-reversible change to the existing second floor because of the introduction of large amounts of structural framing and the removal of existing wood trusses. This plan, however, permits the incorporation of all existing departments within the Town Hall building.

ALTERNATE THREE – New three-story scheme with restoration of the auditorium and major addition.

Alternate Three restores the auditorium to its original configuration and use as an auditorium and constructs a major addition in the rear parking lot. This alternate allows for future growth of town hall functions but eliminates most of the on-site parking. Because this scheme involves the greatest volume of restoration work and new construction, it is the most expensive to construct.

The results of Task II were presented to the PPBC at their public meeting on October 29, 2007.

Task III – Develop & Refine Alternative Design Schemes

During November 2007 McGinley Kalsow & Associates advanced and refined the three alternative design schemes. In addition, the architect's cost estimating subconsultant, D.G. Jones International, began to prepare conceptual cost estimates for each of the three alternative design schemes to facilitate the comparison and evaluation of the three schemes (See Conceptual Cost Estimates in Appendix.)

The architects attended a meeting with the Needham Commission on Disabilities on November 20, 2007 to review proposals to make the front ceremonial entrance accessible to persons with disabilities. The Commission voted that this be a requirement. The Commission also stated that ideally, all entrances should be accessible. The architects also met with Town Hall department heads on November 26 to review proposed floor layouts for their comments and to solicit their input.

A presentation of the refined alternative design schemes was made to the PPBC at its meeting on November 26, 2007. Discussion also reviewed scheduled public presentations of the proposed alternative schemes to the Board of Selectmen (BOS) on December 4 and a PowerPoint presentation of the overall study to the general public on December 10.

A meeting with the Historical Commission was held on November 29, 2007 to review the alternative schemes. The Assistant Town Manager and the PPBC Director of Construction and Renovation, assisted by McGinley Kalsow & Associates, presented the various elements of the three schemes for their consideration. The Commission expressed their appreciation for the overall effort to carefully renovate and restore the historic fabric of the Town Hall. They also expressed concern about alteration of the front ceremonial entrance to accommodate the proposed accessible ramp.



Existing Front Ceremonial Entrance and Portico

Task IV – Presentation and Review of the Alternative Design Schemes

On December 7, 2007 the Town Manager, Director of Construction and Renovation, administrators, department heads and architects toured the Groton Town Hall to review their renovated town hall and talk with town hall staff. The Groton Town Hall has a restored auditorium with partial height partitions so that the space can be used by the Planning Department, Inspectional Services, Board of Health and Selectmen’s meetings.

On December 10, 2007 the BOS & PPBC held a formal public hearing to review the progress of the feasibility study and to present the three alternative design schemes for public consideration and input. All members of the Board of Selectmen and a large audience were in attendance. The public hearing was also televised for the benefit of all citizens.

The architects reviewed the overall feasibility study to date and presented each of the three alternative design schemes and discussed the common and different components of each scheme.

All alternatives have an accessible ramp at the ceremonial front entrance and portico. This would reduce two of the six parking spaces closest to the entrance, leaving a total of ten parking spaces in Garrity Way. The step down at the front door would be eliminated by raising the floor of the entrance portico to match the first floor elevation of the building and the top landing of the new accessible ramp.



Town Hall with Proposed New Accessible Ramp at Ceremonial Front Entrance and Portico (Landscaping in front of ramp to the right of the stairs is not shown so the structural changes can clearly be seen.)

Alternate 1 would require a small addition in the back parking lot to house an elevator, stairs, storage and bathroom. This alternative would give the Town Hall three levels of offices and would move the Planning and Economic Development Department and the Park and Recreation Department out of the building. The option of restoring the auditorium would be possible in the future. It is thought that 91% of this alternative would qualify for Community Preservation Act (CPA) funding.

Alternate 2 would remain within the current footprint of the building and would permanently alter the auditorium space leaving no option of future restoration. This would provide the Town Hall with four levels of offices and house all current departments in one building. Approximately 46% of this alternative would qualify for CPA funding.

Alternate 3 would have a major addition at the rear of the building in the parking lot area. This alternative would house all current departments at Town Hall and would restore the auditorium, which would have a capacity of approximately 350 people. It is estimated that approximately 69% of this alternative would qualify for CPA funding.

Several citizens spoke in favor of restoring the auditorium for music events, dance groups, speakers, civic ceremonies, public meetings and exhibit space. Questions were posed regarding the amount of CPA reimbursement funds that could be expected. The Town's Tricentennial occurs in 2011 and it was noted that it would be desirable to have the Town Hall renovation completed for this occasion.

Following the public hearing the architects continued to develop the three alternative schemes by considering the input and feedback generated at the hearing. A comparison was generated of the existing and proposed square footage of all Town Hall spaces for each of the three alternatives. The architects' cost estimator prepared Update 2 of Conceptual Cost Estimates on January 3, 2008. The architects prepared a Project Cost Summary with estimated CPA funding based on the opinion presented by the Town's Bond Counsel for each of the three alternatives (See Project Cost Summary under Alternative Design Schemes). These were presented and discussed at the PPBC meeting on January 7, 2008.

Task V – Study Recommendations with Plans & Costs & Selection of Preferred Alternative

Following the January 7, 2008 presentation, the architect continued to review the three alternative schemes and to respond to PPBC and staff questions about the schemes.

The three alternative schemes were presented to the Board of Selectmen at their meeting on January 22, 2008 by the Town Manager, PPBC Chairman and PPBC Director of Construction and Renovation. The recommendation of Town Management was Alternate 1 as the preferred scheme in that it is the most cost effective option that maintains flexibility for future expansion or restoration of the second floor auditorium. The Selectmen were assured that renovation could be completed for the Town's 300th birthday celebration in 2011 if the project is approved this spring. After discussion the Board of Selectmen voted unanimously to endorse Alternative 1.

The PPBC meeting on February 11, 2008 considered the three alternative schemes. The three alternative schemes were again reviewed and the PPBC elected to proceed with Alternative 1. This alternative requires a small addition in the back parking lot to house an elevator, stairs, storage and bathrooms. This alternative would give the Town Hall three levels of offices and would move the Planning and Economic Development Department and the Park and Recreation Department out of the building to the proposed DPW building. The designer selection process is currently underway for a new 24,000 square foot DPW Administration Building. The new DPW building is also being considered as temporary offices for the Town Hall during its renovation. The proposed Town Hall renovation and DPW Administration Building projects are connected through this temporary Town Hall offices and departmental relocation. The option of restoring the auditorium would be retained for future consideration. This alternative would qualify for the highest percentage of CPA funding.

Those present were asked to identify any areas that need to be more fully explained in the final report. The PPBC asked that a review of the issues surrounding the stage should be included, which would expand on the pros and cons of keeping the stage or removing it. The proscenium arch would not change with either option. The architects were requested to check the stage for structural soundness on this matter along with an explanation of why the elevator/stair/bathroom addition is located closer to Highland Avenue rather than Chapel Street. The architects reviewed the structural soundness of the stage with their structural engineer and concluded that this is not an issue relative to the renovation options.

Review of Stage Options Use

The original auditorium was on the second floor of the Town Hall with the stage located at the west (Chapel Street) end, and the main stair located on the east (Highland Avenue) end. In 1952 the auditorium and stage was converted into offices with the use of modular metal partitions and an acoustical ceiling at 8 feet above floor level. The entire volume of space and some of the historic moldings and finishes were lost during this construction. (The upper half of the auditorium with trusses is clearly visible from the balcony.)

Alternate 1 proposes to remove the 1952 metal partitions and restore the original volume of the auditorium. Existing molding and details will be restored and missing moldings and details will be replicated. The proscenium arch will be opened up and restored. Paint analysis will be undertaken so that the historic paint scheme can be replicated.

Different alternatives were discussed regarding how to handle the stage area. Alternative 1 shows two conference rooms at the stage level with a wheelchair lift to the south or left of the proscenium arch, and steps up to the right of the stage to provide access to the egress stairs. Other alternatives discussed included combining the two conference rooms into a single room so as to avoid any accessibility questions regarding the second conference room located on the stage. The other alternative would remove the raised stage and construct the two conference rooms at the main second floor level. The proscenium arch and stage apron will remain as a façade to visually define the stage. During meetings with the PPBC it was decided that these

three alternatives would be further developed, reviewed and decided upon during the schematic design phase of the project.

Elevator/Stair/Bathroom Addition

The elevator/stair/bathroom addition was located closer to Highland Avenue for several factors. The core provides required code egress from the Ground Floor at the Highland Avenue end to complement the existing stair egress at the Chapel Street end. Two well-separated means of egress are required from each floor. If the core was located towards Chapel Street, this required separated egress could not be met. In addition, the service entrance to the Ground Level is better located for deliveries, service access to lower level and trash removal if the addition is located at the Highland Avenue end. There is a greater setback distance from Highland Avenue than Chapel Street, which provides better design flexibility and less visibility of the addition as the new structures relates to the historic Town Hall. With a greater setback there is also a greater space for pedestrian access from the street into the addition. Since there is substantially more vehicular traffic on Chapel Street, the Highland Avenue side would be safer for pedestrians entering the new accessible elevator entrance. The greater traffic and only public vehicular entrance off Chapel Street infers the addition should be located on the Highland Avenue side in order to preserve the most often viewed facades of the building. This is supported by March 2008 traffic counts from the Needham DPW showing that Chapel Street is more (over 1 ½ times) heavily used on a daily basis than Highland Avenue. Further, the southbound traffic along Chapel Street, where the predominant view is the back of the Town Hall, is over twice as much as Highland Avenue.

The architects were requested to evaluate the proposed 7th Edition of the Massachusetts Building Code, which will probably be in effect prior to the issuance of a building permit for the project.

The architects reviewed the proposed 7th Edition of Massachusetts State Building Code (MSBC) relative to the Alternate 1 Design Scheme for renovation of Town Hall. They believe that there will be no major changes to Chapter 34 of the MSBC that would have a significant impact on the Alternate 1 Plans. The question of utilizing wholly moveable partitions on the second floor was also discussed.

The Community Preservation Committee voted on January 30, 2008 to include the Town Hall project in their warrant article for the May Town Meeting.

Task VI – Completion of Study

During February, the architects made final revisions and refinements to plans and support information to reflect the input from meetings, questions and recommendations during the review of the alternative schemes. In response to these recommendations, conference space on the first floor was increased to accommodate staff and the public. This was accomplished by relocating the Retirement Offices to the second floor, rearranging the Assistant Town Manager's office and moving a conference room (one of three shown) to the first floor. Plans, graphics and layout for the Final Summary Report were prepared and formatted. The floor plans showing

office and departmental locations are preliminary. Final locations and configurations are subject to revision during the development of the design and final construction plans.

On February 29th the Town Manager, Director of Construction and Renovation, administrators, department heads and architects toured the Ashland Town Hall to review their renovated facilities and talk with staff. The Ashland Town Hall retained the volume of the auditorium space and constructed partial height partitions for offices. The proscenium arch was retained and the stage floor level was removed so that the Board of Selectmen's Meeting Room was on the same level as the main second floor. The Town of Ashland staff enjoys working in the auditorium offices. However, the significant altering of original auditorium finishes and the removal of the stage level is a loss of historic integrity and is not easily reversible. The façade of the stage level was not retained. The proposed Alternate I Scheme for the second floor of the Needham Town Hall allows the auditorium to be readily restored by simply removing the freestanding office construction.

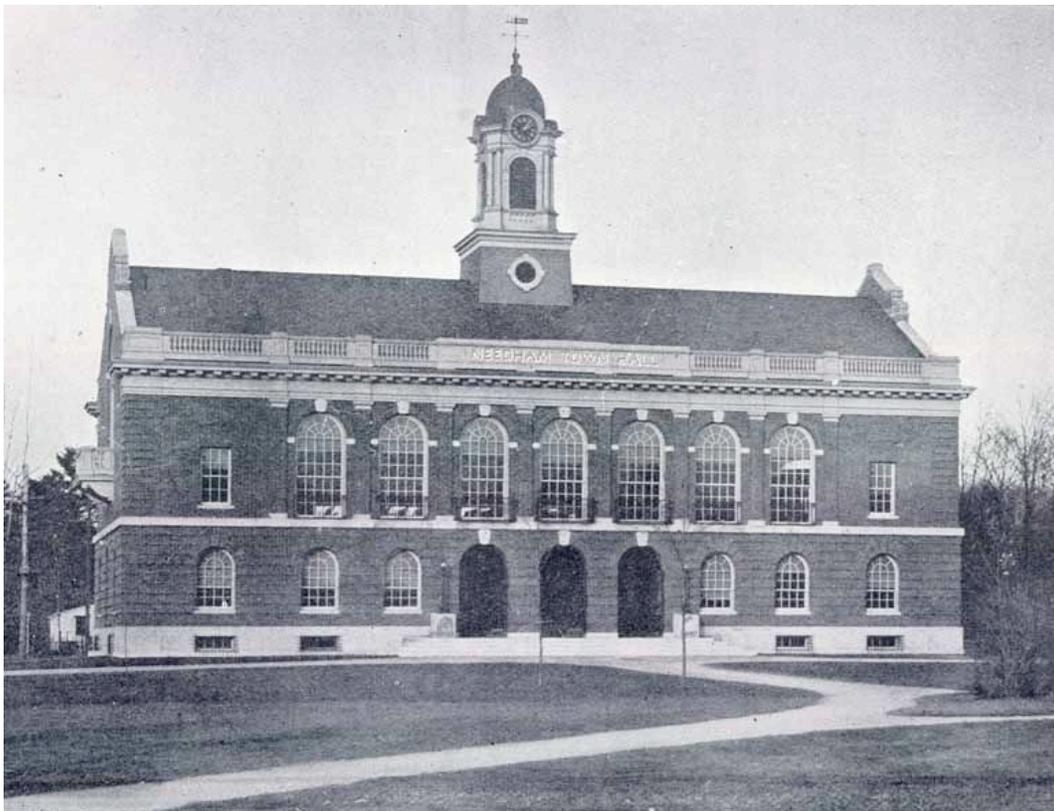
This Summary Report has been prepared to assist Town officials and boards in preparation for consideration of the Town Hall article in the forthcoming May Annual Town Meeting.



HISTORY OF TOWN HALL

The area around Town Hall became the town center in the 1850s when the junction of two railroads and a depot were constructed in this area. The previous town hall and town center were located a mile west on Great Plain Avenue near McIntosh Corner and Central Avenue. By the 1870s there were churches, schools and the meetinghouse, which was moved from Central Avenue to the new center. A new Town Common was created with the intent to build a new town hall at this site. In 1901 an additional parcel of land was purchased and added to the north end of the site.

In 1902 a Town Hall Building Committee was established and charged by Town Meeting to prepare plans for a badly needed new Town Hall. The committee chose the highly respected architectural firm of Winslow and Bigelow of Boston who had designed many of the significant public, institutional and commercial buildings in Boston and surrounding areas, primarily in the Georgian Revival style. Partner Henry Forbes Bigelow was the principal architect for the Needham Town Hall and it has been stated that it was patterned after Independence Hall in Philadelphia with its triple arched entrance, round-arched windows and Palladian windows at both ends. The contractor was Mead, Mason & Co. of Boston. The cornerstone was laid on September 2, 1902, though its location is still debated. The building was completed at a cost of \$57,500 and dedicated on December 22, 1903.



The Town Hall and the Town Common are one integral parcel of land and were both placed in the National Register of Historic Places on November 11, 1990 as the Needham Town Hall Historic District. For more detailed information on this designation, see the complete National Register Nomination Form in the Appendix.

Despite an extraordinary search at the beginning of this feasibility study for the original plans of the building, these have not yet been located. The Massachusetts State Archives and local archives of the Needham Public Library, Building Department and the Historical Society were all searched without success. However, portions of exterior elements of what appears to be sections from original plans were seen on a local architect's plans for exterior Town Hall repairs in 1985 and 1988. The search for the original plans should continue.

Originally, Town Hall contained the police station and lock-up at the ground floor level along with a kitchen and a fireproof vault for town records. The first floor was primarily for offices of the Board of Selectmen, Town Clerk, Assessors, etc. The second floor was the auditorium and balcony for Town Meetings and local civic performances and activities.



The changes and alterations to the interior of Town Hall have been driven by changes to building codes and by the evolution of municipal services over the past century. The Police Department

moved out of Town Hall in 1937 into its own building and all spaces were reserved for town offices by 1951. Town Meeting was last held in the auditorium in 1952. At that time the auditorium and stage were converted into a new second floor for badly needed office space following the growth of municipal services after WWII. While the original appearance and historical character of the first floor has remained essentially intact, the conversion of the auditorium and stage significantly altered the use and function of the second floor.



In 1961 a new dry pipe sprinkler system was designed. The layout plans show the location of various Town Hall departments as follows:

- Ground Floor: Engineering and Board of Health Clinic
- First Floor: Selectmen, Public Works, Treasurer, Assessors, Town Clerk and Water & Sewer
- Second Floor: Accounting/Finance & Retirement, Planning Board, Inspection and Board of Appeal

Also in 1961 plans were developed to provide new toilet facilities and public counters on the first and second floors. In 1971 a new steam boiler was installed. In 1985 and 1988 some renovations

were made to exterior masonry on the east end elevation and the decorative balconies at both ends of the building. In 1993 toilet rooms were made accessible to persons with disabilities and public counters upgraded. In addition, major renovations were made in late 1993 to the slate roof and related metal flashings in the amount of \$175,000.

In 1999 the Town commissioned a Townwide Comprehensive Facilities Study that included an inspection of Town Hall and an evaluation of this facility to meet future Town Hall requirements. Numerous improvements and upgrades were needed to existing building components and particularly to all systems. The study recommended that the building be retained and states, “Even with the problems identified, Town Hall offers a strong sense of identity and pride, potentially capable of continued service to the Town.”

In 2005 the Town PPBC began a Facilities Master Plan that was completed in November 2006. This Master Plan also studied and evaluated Town Hall to meet existing and future needs. It recommended retention and renovation of the existing building including its historic exterior. It also proposed options for accommodating space needs with either an “Infill Addition with a new third floor” or a new “Atrium Addition” built on the existing parking lot. As a result of the recommendations of this Facilities Master Plan, the Community Preservation Committee sponsored an article in the 2007 Annual Town Meeting to appropriate funds for the PPBC to undertake and develop conceptual historic renovation plans for Town Hall. Following approval of this article by Town Meeting, the PPBC developed and issued a Request for Proposals that was undertaken as documented in this Summary Report.



**NEEDHAM TOWN HALL
SPACE NEEDS STUDY
October 26, 2007
Revised March 5, 2008**

Space-Use Analysis (Including Matrix I and Matrix II)

We completed our interviews with Town Department heads on October 2, 2006 and began our space-use analysis. Using the results of these interviews and our inventory of existing Town Hall spaces we carefully reviewed all of the information and data on the questionnaire for each department.

We then developed Matrix I that summarized all of the department’s present occupied spaces including present personnel with a 5-year forecast; equipment and special needs or requirements; ability to share space and equipment; and out-of-office storage needs, including an estimate of storage that should remain on the premises and that which could be located in a remote, secure and accessible site. The matrix was developed to analyze the net space uses and space needs and does not include corridors, stairs, public entries or bathroom spaces. In addition, support spaces such as conference/meeting rooms, separate/shared copy spaces, lunchroom, separate storage rooms or spaces and maintenance spaces were defined and evaluated separately from net occupied spaces.

This information including a preliminary net estimated future office space is shown in Matrix I and may be summarized as follows:

Department	Net Existing s.f.	Staff	
		Present	5 Year
<u>Town Administration</u>			
• Town Manager/Selectmen	730	2 + 3 PT	3 + 2 PT
• Asst. Town Manager – Finance	78	1	1
• Asst. Town Manager – Personnel	423	3	4
• Town Clerk/Registrar	784	4 + 2 PT	4 + 2 PT
• Accounting	507	4 + 1 PT	4 + 1 PT
• Treasurer/Tax Collector	722	5 + 2 PT	5 + 2 PT
• Retirement	259	2	2
• IT Center	1,162	4	5
• Assessor’s	772	5	5
<i>Subtotal, Town Administration</i>	<i>5,437</i>	<i>30 + 8 PT</i>	<i>33 + 7 PT</i>
<u>Community Development</u>			
• Planning & Economic Dev.	<i>707</i>	<i>3 + 1 PT</i>	<i>3 + 1 PT</i>

Community Services			
• Public Health	849	4 + 5 PT	4 + 6 PT
• Veteran's Services	163	1 PT	1 PT
• Youth Services	686	3 + 1 PT	4
• Park & Recreation	626	4	4
Subtotal, Community Services	2,324	11 + 7 PT	12 + 7 PT
TOTAL DEPARTMENTAL SERVICES	8,468	44 + 16 PT	48 + 15 PT

SUPPORT SPACES (Meeting Rooms , Copy & Supply Rooms, Direct Storage Rooms, Lunch Room)	2,827		
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TOTAL NET OCCUPIED FLOOR SPACES*	11,295		
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* Does not include corridors, stairs, public entries or bathroom spaces.

As indicated above, the present level of 44 full-time and 16 part-time employees will change to 48 full and 15 part-time employees. Of this increase of 4 full-time employees, one is presently part-time and will increase to full-time so that the overall net increase in employee stations will only be 3 full-time and 1 part-time.

Projected Space Requirements

Following our analysis of existing space uses and another review of the departmental questionnaires, we further analyzed and evaluated out-of-office storage requirements of each department including estimates of secure off-site/remote but accessible storage, evaluation of meeting/conference rooms and various support or shared functions.

Matrix II shows existing and projected space projections for each Town Hall department, including estimates of their out-of-office space that should remain at Town Hall and estimates of storage that could be relocated to another site. The projected new office spaces were then incorporated into Matrix I for comparative purposes.

A summary of these departmental projections and out-of-office storage is as follows:

Department Total Spaces	Existing Space		Projected Space		
	Net Office s.f.	Storage s.f.	Net Office s.f.	Storage s.f.	
				Town Hall	Remote
	8,468	2,167	9,680	1,650	1,550

The projected net office space growth to 9,680 s.f. is an increase of 1,212 s.f., or 14.3% over the current 8,468 s.f. In addition, the projected out-of-office storage of 3,200 s.f. is an increase of 1,033 s.f. or 47.7%. However, the use of a remote location of approximately 1,550 s.f. would reduce out-of-office storage in Town Hall to 1,650 s.f. or a reduction of 517 s.f. or 23.9%. The total departmental net office space and projected Town Hall out-of-office storage in 11,330 s.f.

See Matrix II for details on each respective department.

Other Preliminary Space Considerations

Preliminary estimates have been made for spaces that are integral to an efficient operation of Town Hall. These are summarized below, but will be revised as renovation alternatives are advanced.

TOWN HALL SUPPORT SPACES

Shared Meeting Rooms	Existing s.f.	Proposed	Proposed s.f.
Selectmen’s Meeting Room	443	Restore Selectmen’s Meeting Room to original size & configuration by including Treasurer’s Office (108) & restore original wall fabric.	587
Training Room	200	Replace with new small meeting conference room on Ground Level.	150
Second Floor	--	Create new meeting/conference room to serve Second Floor (could be combined w/ another major user.	250
<i>Subtotals</i>	643		987
Support Rooms	Existing s.f.	Proposed	Proposed s.f.
Lunch Break Room	219		250
Town Clerk Storage	332		300
Record Storage Vault	223		223
Assessor’s / IT Storage	146		300
Paper Supply Room	154		170
Cable TV	25		30
Copy Room (s)	106		80

Public Health / Veteran's Storage	73		100
Mail Room	82		80
Custodian	205		200
Lower Level Corridor Storage & Trash Storage	250	Storage to Remote Location	
Park & Rec. Storage (Over Stage)	169		100
General Storage at and Over Stage	169		169
Custodial Closet	31		30
Subtotal	2,184		2,032
Total Support Spaces	2,827		3,019
Total Net Occupied Floor Spaces*	11,295		12,699

***Does not include corridors, stairs, public entries or restrooms.**

****Under Alternate No. 1, Planning and Economic Development as well as Park and Recreation are relocated outside of Town Hall.**

Department & Support Spaces	Net* Existing s.f.	Staff		Equipment									Requirements					Net* Estimated Future s.f.	Net Proposed Square Footage		
		Present	5 yr.	2/3-Drw File	4-Drw. File	Lateral File	Flat File	Station/Comp	Printer	Copies/Day	Book-cases	Table/Chairs	Support	Special	Common	Secure	Storage		Alternate 1	Alternate 2	Alternate 3
<i>TOWN ADMINISTRATION</i>																					
Town Manager/ Selectmen	730	2 + 3 PT + Intern	3 + 2 PT + Intern	7	1	10	—	4/4	3	100+	3	1/4 + 1/2 + 1	TM's Assistant needs private space. Need highly functional copy machine.	Need to be near Conference Room & 2 Asst. Town Managers, Even share space.	Need TM-dedicated conference room with 1-2 work tables	Lockable cash/check box	1-4 Drw file, 4-3 Drw files, 1 medium safe, 1 large safe (can be in basement)	1080	757	744	757
Finance/ Asst. Town Mgr.	78	1	1	—	4 + 1-5 Drw	3	—	1/1	1	12-1000	—	—	Desktop scanner. Need conference area for 4 persons.	A receptionist would be ideal.	Access to large conference room	—	Confidential, current and past year in office, rest elsewhere.	150	275	265	256
Personnel/ Asst. Town Mgr.	423	3	4	1/1	13 in hall	10	3	3	3	Varies			Typewriter, could be shared. Need privacy.	Need 3 private offices to deal with sensitive meetings.	Large meetings could be in large common meeting room.	Secure & fire-safe storage of records.	13 file cabinets in hallway, could be off-site.	500	679	679	679
Town Clerk/ Registrar	784	4 + 2 PT	4 + 2 PT	3	4	2	small 6-10	6/5	4	50+	3	2 cabs	Likes existing counter. Does not like roll-down grate. Be close to TM & IT. Vault.	VIP to be close to large conference room at elections. TC needs private office w/ meeting space.	Need work table & chairs for meetings, work space & election work.	State-approved vault w/ roller shelving. Storage of vital & archival records. Daily cash.	Election equipment	850	781	781	781
Accounting	507	4 + 1 PT	4 + 1 PT	2	9	12	—	5/5	4	++	20	0/2 1 cab	Typewriter. Need work table. Need small counter for filling out forms.	Do not need to be near other depts.	—	—	Only current storage needs to be in offices, but old storage is a big issue.	525	939	809	897
Treasurer/ Tax Collector & Parking Clerk	722	5 + 2 PT	5 + 2 PT	11	8 60-5Drw on Balcony	—	—	7/8	6			0/5	Dedicated typewriter, 2 station counter, Copier	TC needs private offices to meet with taxpayers. Needs more space for filing.	PT Parking Clerk should have own separate office space of 80 s.f.	Security glass, door lock & panic button. Secure cash area.	60-5 drawer files for dead storage. Can be off site.	800	705	922	1,109
Retirement	259	2	2	8	5	2	—	2/2	2	25		5 1 cab	Typewriter. Need privacy.	2 separate offices. Need for private meetings.	Should be close to Personnel & Payroll Offices	Personnel records must be secured.	Storage for 25+ boxes of which 20 could be off site.	250	432	234	432
Information Technology Center	1,162	4	5	13	0	0	0	7/12	5 + plotter	40	Shelves	Work Tables	12 data shelves, Backup devices. IBM server w/ BU, Folding/Stuffing/Binding Machine	Need generator to ensure backup power. Need to isolate services in secure space.	Need space for work tables, racks & storage racks.	Overall security of IT Dept. is critical. Limit access to space, secure server room.	Need storage room for computer & printing supplies.	1100	993	925	1,074
* Does not include corridors, stairs, public entries or bathroom spaces.																					
Assessor	772	5	5	19	—	—	2	6/16	3	50		2/5 2 cabs	Public counter. Private space for Assessor to meet with taxpayers.	Need to be on same floor w/ Treasurer & Town Clerk.	—	Cash box/small safe	36 s.f. cabinet in ground level. Need 600 c.f. of storage, most could be off site.	775	727	936	942
<i>Total Administration</i>	<i>5,437</i>	<i>30 + 8 PT</i>	<i>33 + 7 PT</i>															<i>6,030</i>	<i>6,288</i>	<i>6,295</i>	<i>6,927</i>
<i>COMMUNITY DEVELOPMENT</i>																					
Planning & Economic Development	707	3 + 1 PT	3 + 1 PT	2	24		5	3/3	3	150		3/19	4 tube files, 1 cabinet, 5 bookcases.	Need to be adjacent to 10 person meeting room.	Could share office space w/ BOA & DRB at DPW.	—	Have large storage in balcony.	850	0	728	872
<i>COMMUNITY SERVICES</i>																					
Public Health	849	4 + 5 PT	4 + 6 PT	16	2	6	—	8/9	5	100s	8	2/12	Need 6 private offices for confidentiality. Need work table to view plans.	35-40% of visitors are handicapped. Hand wash sink, Refrigerator	Need conference room but could be shared.	Supply storage room. Need security for \$ & records.	File storage room that could be shared. Lateral files now in corridor.	1050	1,168	1,273	1,397
Veteran's Services	163	1 PT	1 PT	2	7	—	—	1/1	1	—	—	0/2	Should be easily accessible to older & disabled persons.	Need to have private space to meet with veterans or family.	—	—	2 file cabinets adjacent to office. Some storage in room with Public Health.	200	99	269	99

Department & Support Spaces	Net* Existing s.f.	Staff		Equipment									Requirements					Net* Estimated Future s.f.	Net Proposed Square Footage		
		Present	5 yr.	2/3-Drw File	4-Drw. File	Lateral File	Flat File	Station/Comp	Printer	Copies/Day	Book-cases	Table/Chairs	Support	Special	Common	Secure	Storage		Alternate 1	Alternate 2	Alternate 3
Youth Services	686	3 + 1 PT + 1 INT	4 + 2 INT	6	—	3		5/5	5	20	1	0/13 + 1 cab	3 couches & coffee tables. Wall shelving, sound machines.	Need soundproofing. Intern office, Conference/Presentation Room. VIP to be in downtown area.	Share copier with IT Dept. Could share with DCSS & Veteran's.	Require high level of privacy.	Storage should be in office for confidentiality. Area for supplies.	850	631	719	776
Park & Recreation	626	4	4	3	3	4	—	4/4	3	40		1/10	Bookcases & storage cabinets. Need document storage, cash register.	Need conference room table in office. Need computer on counter for public registration.	Should be at easy in & out location. Willing to share space but not sure others would.	Counter w/ window in VIP. Handle large amounts of \$. Director & Asst. Dir. Need private spaces.	Much storage needed for files, equipment, documents, procurement in office & attic.	700	0	800	927
<i>Total Community Services</i>	<i>2,324</i>	<i>11 + 7 PT</i>	<i>12 + 7 PT</i>															<i>2,800</i>	<i>1,898</i>	<i>3,061</i>	<i>3,199</i>
TOTAL DEPARTMENT SPACES	8,468	44 + 16 PT	48 + 15 PT															9,680	8,186	10,084	10,998
SUPPORT SPACES																					
Selectmen's Meeting Room	443																				
Training Room	200																				
Lunch Room	219																				
Record Storage Vault	223																				
Town Clerk Storage	332																				
Assessor's/IT Storage	146																				
Paper Supply Room	154																				
Cable TV	25																				
Copy Room	106																				
Public Health/Veteran's Storage	73																				
Mail Room/Custodian	287																				
Lower Level Corridor Storage & Trash Storage	250																				
Park & Rec. Storage (Over Stage)	169																				
General Storage at and Over Stage	169																				
Maintenance Closet	31																				
<i>Total Support Spaces</i>	<i>2,827</i>																				
Total Net Occupied Floor Spaces*	11,295																				

* Does not include corridors, stairs, public entries or bathroom spaces.

Needham Town Hall - Department Space Projections - MATRIX II
 October 18, 2007

DEPARTMENTS	EXISTING		FUTURE CONSIDERATIONS	PROPOSED DEPARTMENT SPACES			
	Net Office s.f.	Storage Out of Office s.f.		Net Office s.f.	Storage		
					Total Out of Office s.f.	Location & s.f.	
					Town Hall	Remote	
Town Manager/ Selectmen	730	80 GF	1 extra station - 100 s.f. Dedicated TM Conference Rm - 150 s.f. (Share with Asst. TM's)	1,080	100	100	—
Asst. Town Manager - Finance	78	—	Shared copier & work table between TM & 2 ATM - 100 s.f. Needs private office for meeting w/ 3 people w/ access to copier & conference room.	150	100	100	—
Asst. Town Manager - Personnel	423	200 2F+A	Be close to Retirement Dept. Another staff person projected. Needs 3 private offices. Need better internal storage. Asst. TM should be near Town Mgr. & Accounting. Share copier & conference room. Staff could be elsewhere but nearby.	500	250	100	150
Town Clerk/Registrar	784	387 (GF)	Town Clerk needs private office & new vault. Consolidated storage & better facilities for elections.	850	500	300	200
Accounting	507	200 CR+A +GF	Needs work table & small counter. Better design/organization of office.	525	250	100	150
Treasurer/ Tax Collector	722	500 A	Existing space is adequate. Parking Clerk needs private office. Storage (60 - 5 Drw Cabinets - off site)	800	600	200	400
Retirement	259	100 A	Be close to Personnel staff.	250	150	50	100
IT Center	1,162	350 GF	Additional person in 5 years. Must be secure, lots of deliveries/storage.	1,100	450	350	100
Assessors	772	—	Need more storage.	775	150	50	100

Needham Town Hall - Department Space Projections - MATRIX II
October 18, 2007

DEPARTMENTS	EXISTING		FUTURE CONSIDERATIONS	PROPOSED DEPARTMENT SPACES			
	Net Office s.f.	Storage Out of Office s.f.		Net Office s.f.	Storage		
					Total Out of Office s.f.	Location & s.f.	
					Town Hall	Remote	
Planning & Economic Development	707	100 A	Current plan to subdivide large space. Need large space for storage & review of plans.	850	150	50	100
Public Health	849	125 2F	Need extra station, private offices. Heavy traffic/disabled, more storage.	1,050	200	100	100
Veteran's Services	163	25 2F	Better layout & all (minor) storage should be in office.	200	—	—	—
Youth Services	686	—	Must be in downtown area. Space should be all together. Extra staff now. Need private, soundproof space. Additional room for group programs.	850	100	50	50
Park & Recreation	626	100 A	Private offices for Director, work table & better storage.	700	200	100	100
DEPARTMENT TOTALS	8,468	2,167		9,680	3,200	1,650	1,550

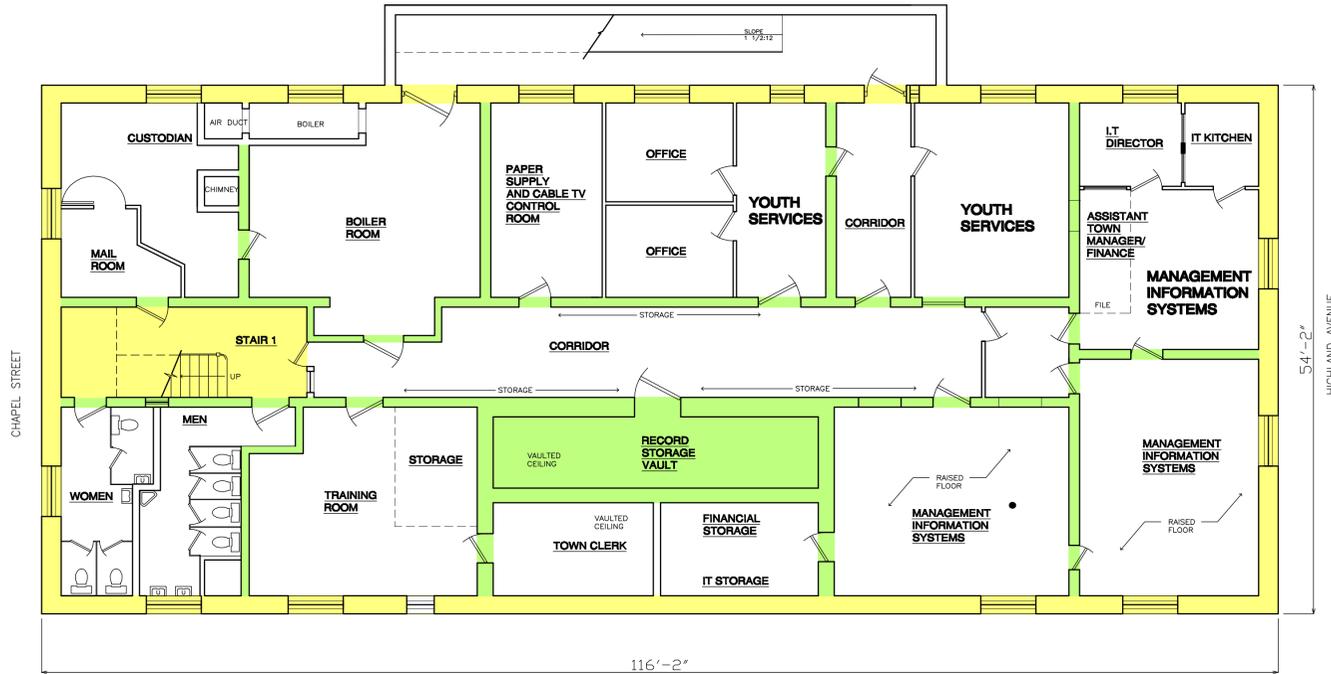
GF - Ground Floor
2F - Second Floor
CR - Copy Room
A - Attic/Balcony

10,635

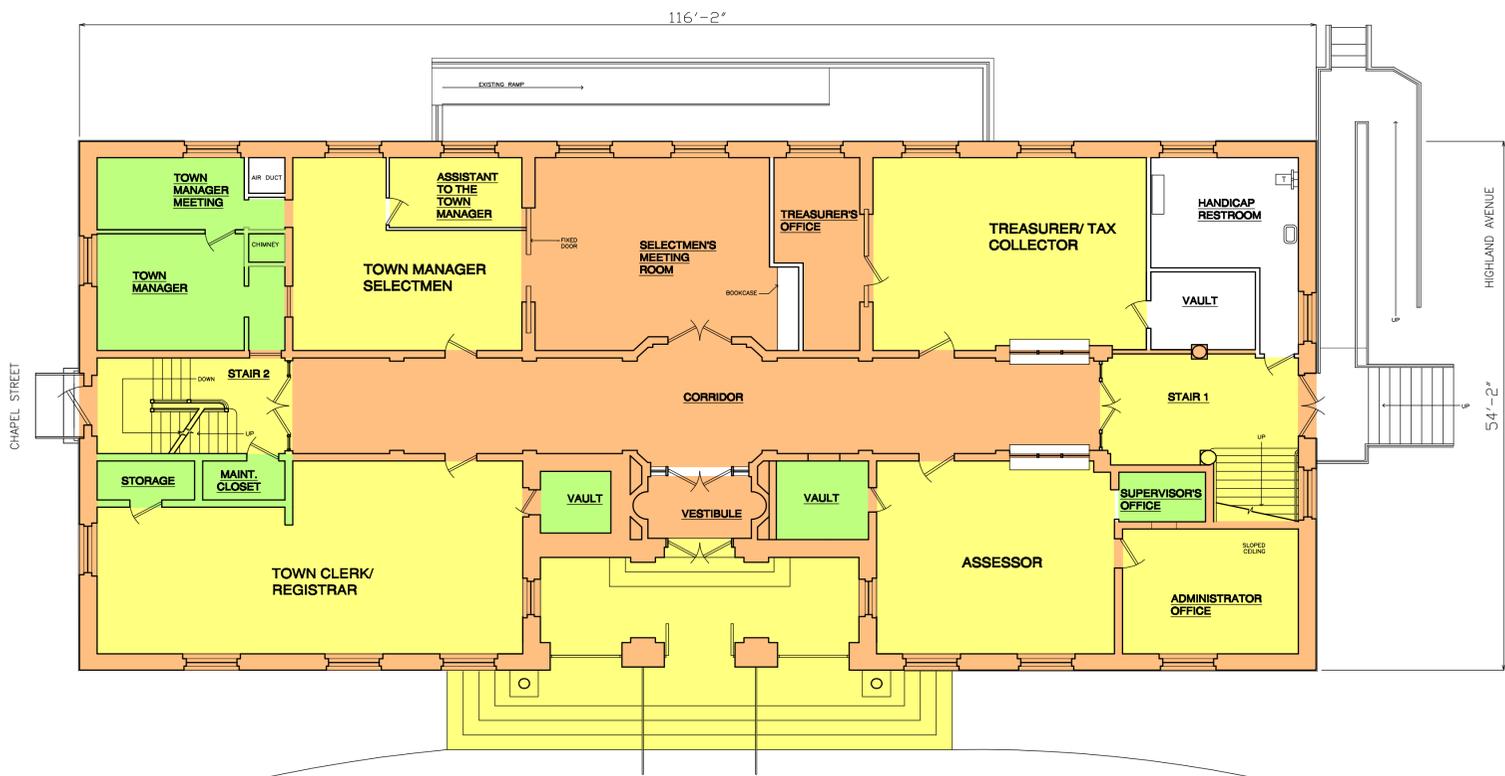
11,330

NEEDHAM TOWN HALL

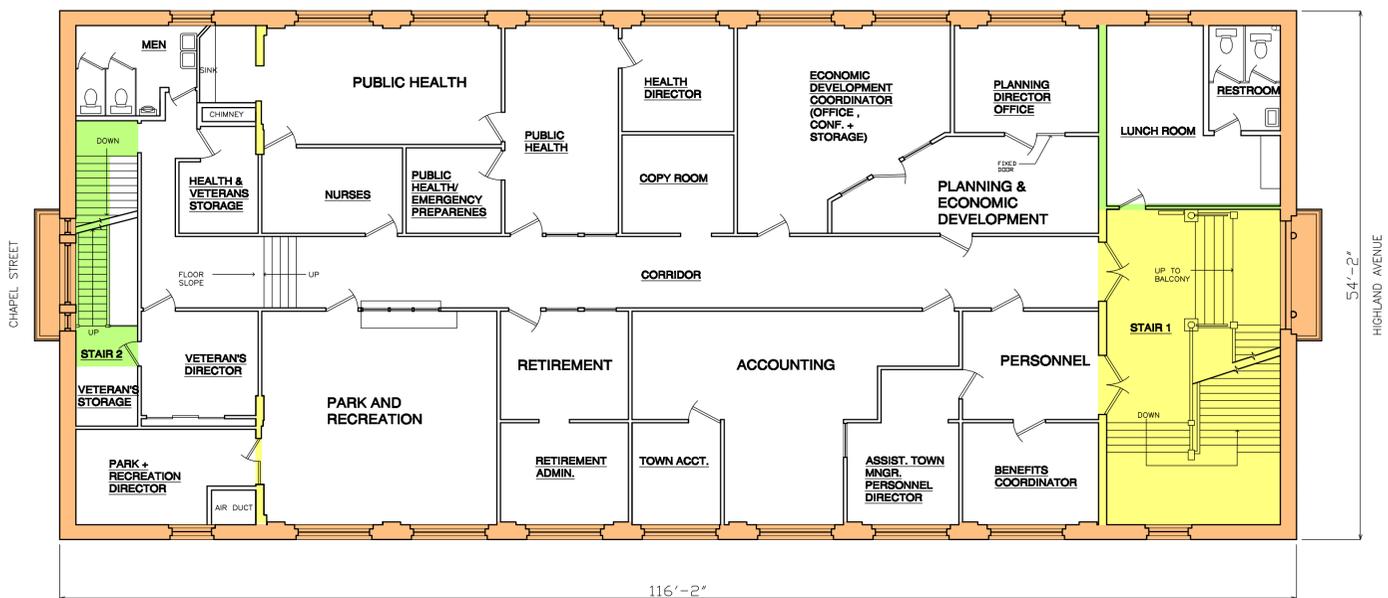
HISTORIC FABRIC



LOWER LEVEL PLAN
1/8"=1'-0"



FIRST FLOOR PLAN
1/8"=1'-0"



SECOND FLOOR PLAN
1/8"=1'-0"



**McGinley Kalsow
& Associates LLP**
ARCHITECTS & PRESERVATION PLANNERS

Historical Evaluation * of Building Fabric	
	SIGNIFICANT & SHOULD BE RETAINED & RESTORED
	SIGNIFICANT & CAN BE SENSITIVELY ALTERED
	CONTRIBUTING & CAN BE MODIFIED
	NON CONTRIBUTING & CAN BE ALTERED OR REMOVED

*BASED UPON APPLICATION OF THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES

