

Town of Sudbury Permanent Building Committee Meeting

December 11, 2013



Sudbury Town Hall Renovation Study

Agenda

- Assessment of Exterior and Interior Building Components
- Conceptual Schemes:
 - Town Offices in Town Hall & School Administration in Flynn
 - School Administration in Town Hall & Town Offices stay in Flynn
- Cost Estimate & Summary

Town Properties in this Study



Town Hall



Flynn Building



Loring Parsonage



Fairbank Community Center

Existing Conditions: Exterior



North Elevation



South Elevation

Floors	1931 Town Hall	1955 Addition
Basement	1,870	1,400
First	4,640	1,400
Second	4,640	0
Mezzanine	850	0
Area	12,000	2,700
Total Area	14,700 gsf	

Existing Conditions: Exterior



Slate, flashings and snow guards in fair to poor condition

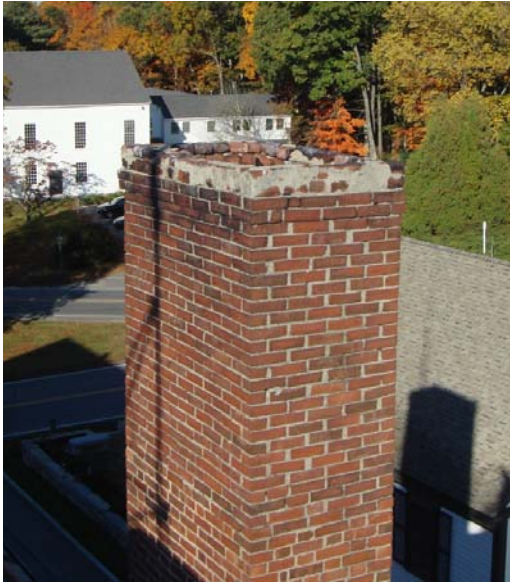


Deteriorating wood soffit



Failing masonry opening at Fire Station doors

Existing Conditions: Exterior



Missing mortar and loose brick at north chimney



Wood windows on 2nd floor in fair condition



Leaking gutters and rain leaders

Existing Conditions: Interior



Historical Society storage in Auditorium



Selectmen's Meeting Room



First floor lobby



Town Clerk's Office

Existing Conditions: Structural



The support beam at the Town Clerk ceiling is sagging.



Plaster cracking at first floor vault wall.



Steel beam in attic supported on brick and cinder block pier.



Rafters not tied to masonry walls

Existing Conditions: Interior



Water damage at ceiling on stage level.



Possible asbestos tile in Town Clerk lobby and north and south wing stair halls



Restrooms at main lobby are not accessible.

Existing Conditions: Services

Recommendations

Conveying

- Provide new elevator to access all floor levels

Plumbing

- Provide new plumbing fixtures in new accessible restrooms
- Provide new water pipes because the existing are likely to have lead solder joints

HVAC

- The existing boiler and steam unit ventilators should be abandoned
- Air conditioning is only in the Town Clerk's office and vaults
- No ventilation system
- Provide new ductless Variant Refrigerant Volume (VRF) and Energy Recovery Ventilation (ERV) system for energy efficient heating, air conditioning, and ventilation.



Plumbing at west entry hall



Air conditioning unit in storage room

Existing Conditions: Services

Recommendations:

Fire Protection

- Provide new full fire suppression system in the building.

Electrical

- Upgrade electrical service and remove electrical panels throughout the building
- Upgrade existing light fixtures and outlets.
- Provide a new exterior generator for emergency power
- Install interior and exterior emergency lighting and exit signs
- Provide a new addressable fire alarm system



Existing fixtures in auditorium

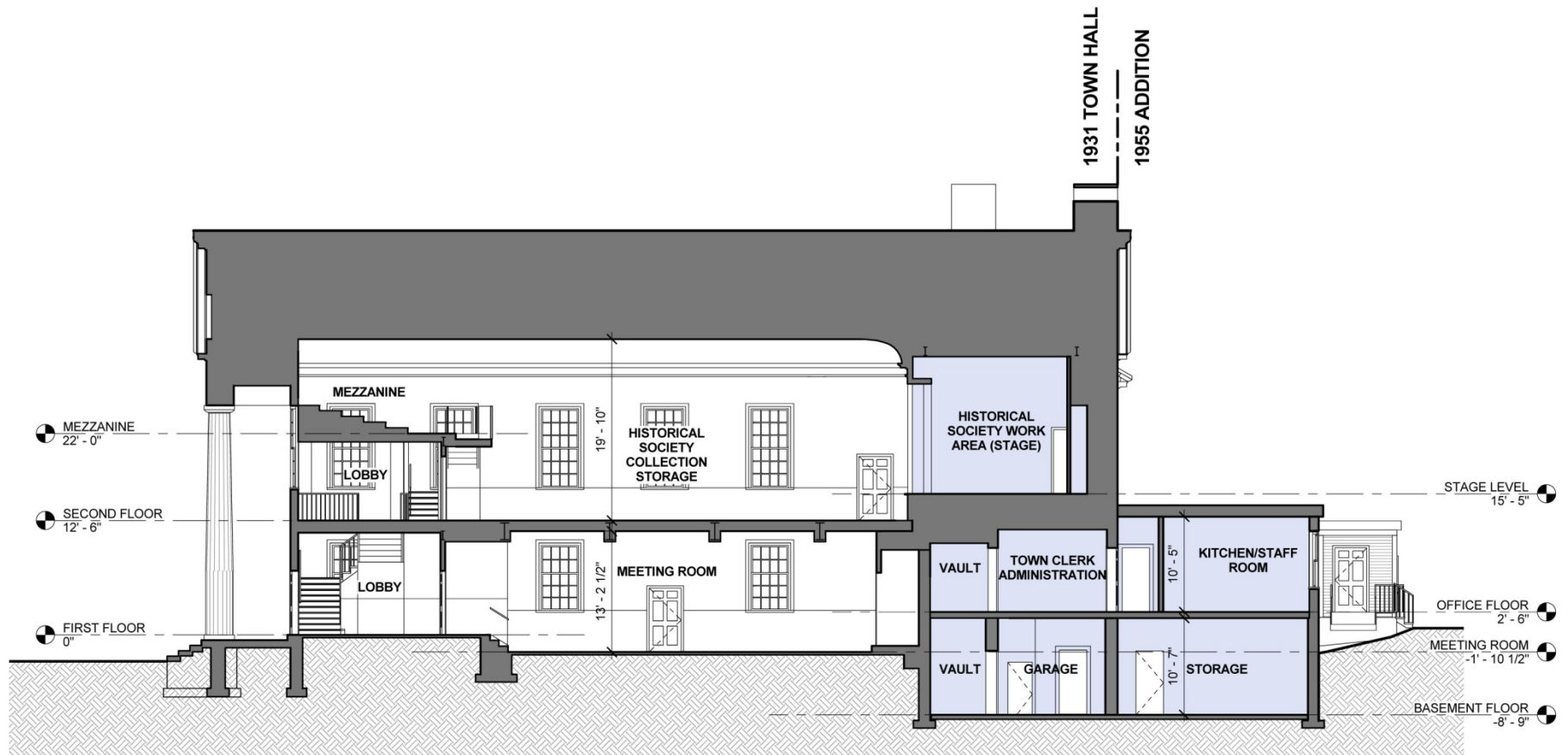


Electrical room in basement



Hanging fixtures in auditorium

Existing Section



Conceptual Schemes

Scheme: Renovate to Consolidate Floor Levels with New Addition

Town Offices move to Town Hall

Design removes the 1955 addition and adds a new 4-story addition (including basement) at the rear of the building.

School Administration moves to Town Hall

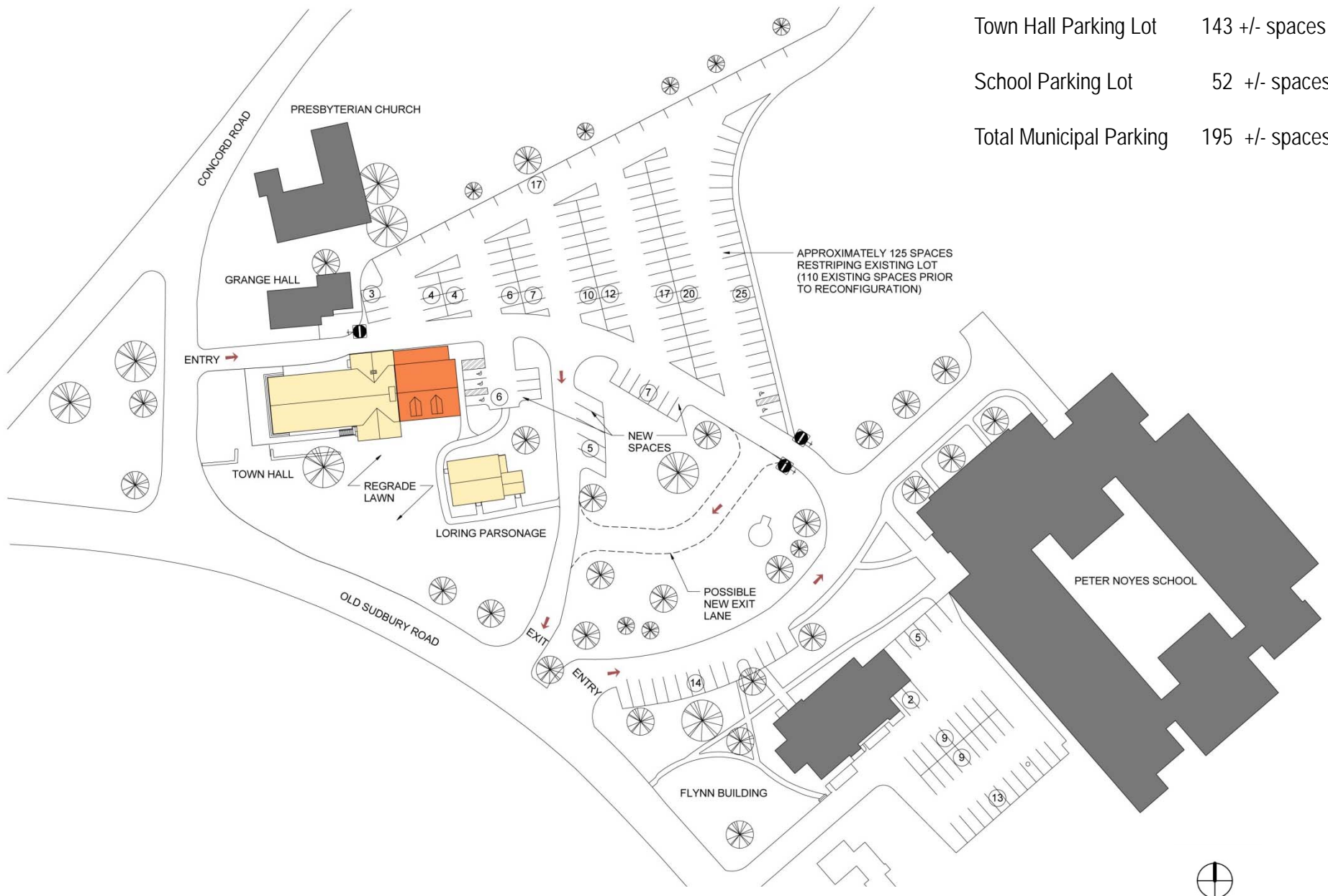
Design adds a 1-story addition on top of the 1955 addition and a 1-story meeting room at the rear of the building.

Renovation / Addition Goals

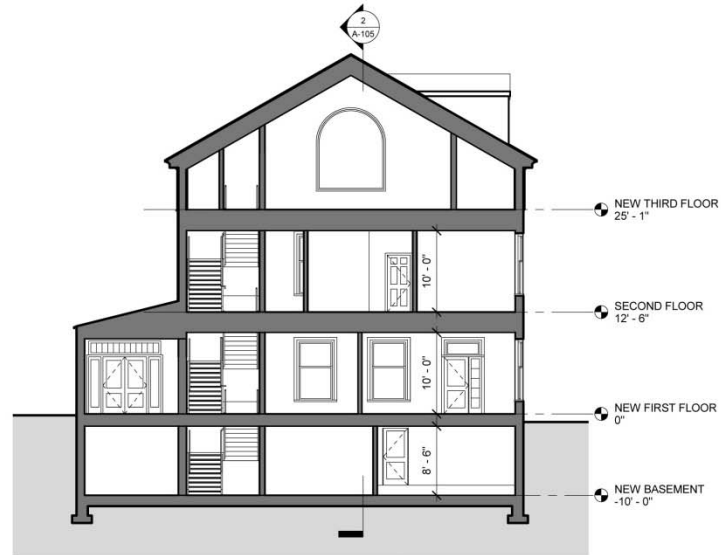
- Improve universal accessibility, fire safety, occupant comfort, & building systems efficiency.
- Create a new accessible entrance near the parking lot.
- Create vertical and horizontal accessible circulation through the building.
- Meet program needs and required sizes for Departments.

Town Offices Site Plan

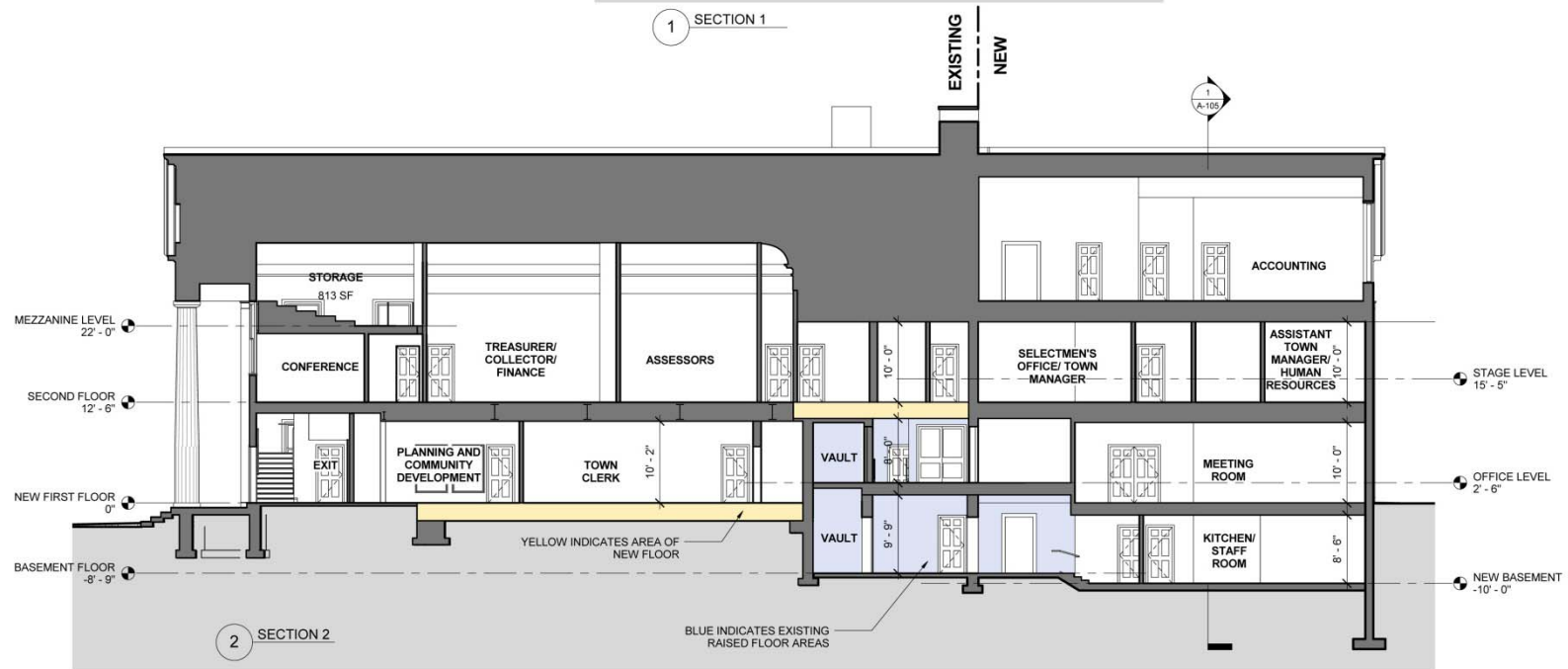
Town Hall Parking Lot	143 +/- spaces
School Parking Lot	52 +/- spaces
Total Municipal Parking	195 +/- spaces



Town Offices Sections

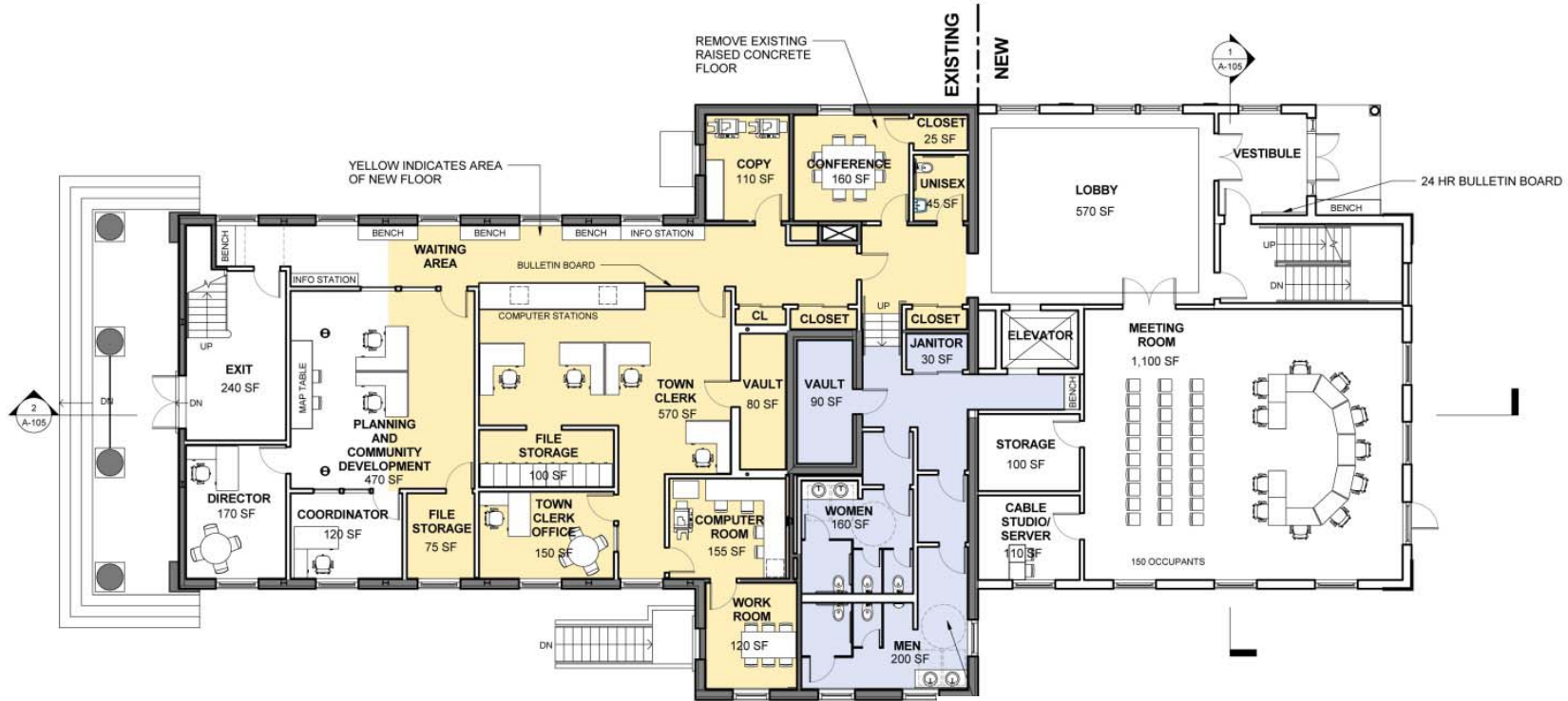


1 SECTION 1



2 SECTION 2

Town Offices First Floor Plan



1 FIRST FLOOR PLAN

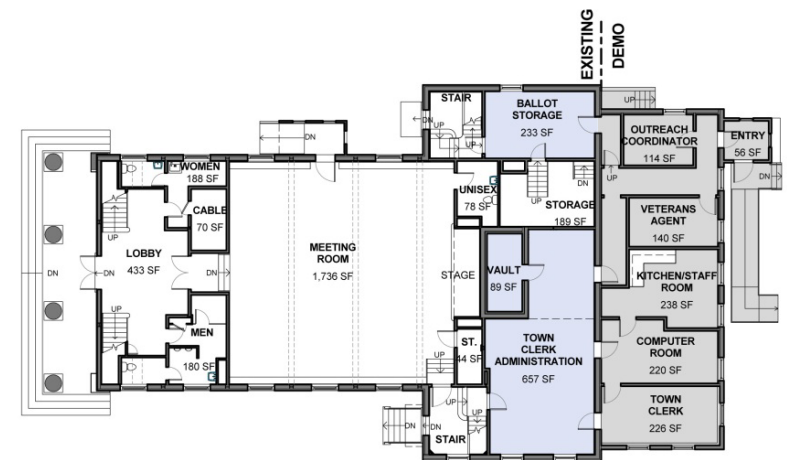
Total Building Area: 20,660 GSF

First Floor Area: 7,200 GSF

First Floor Occupant Load per IBC: 202

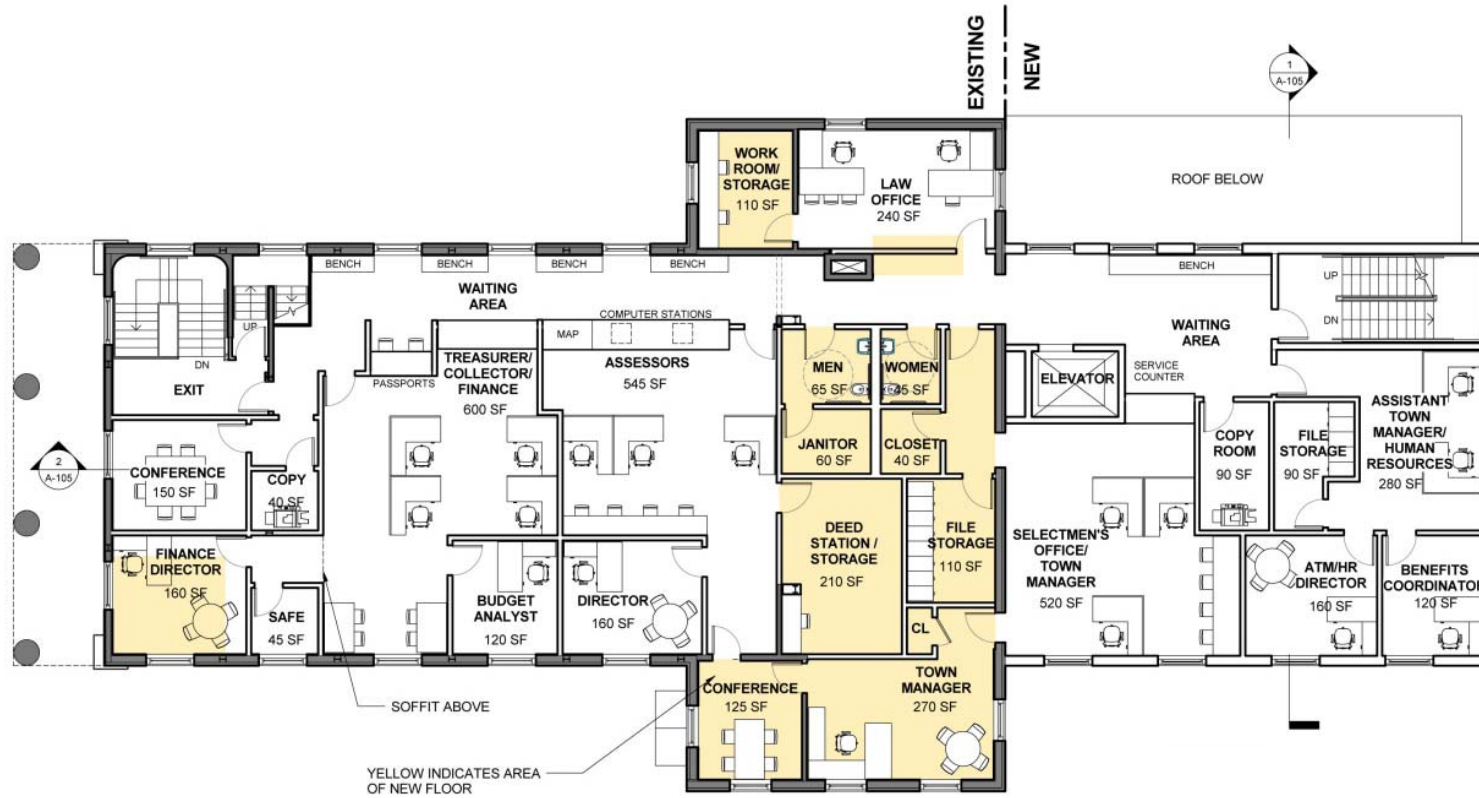
Actual Occupant Load for Fixtures: 159

Required Fixture Count First Floor		
	Toilets/Urinals	Lavs
Female	4	2
Male	2/1	2



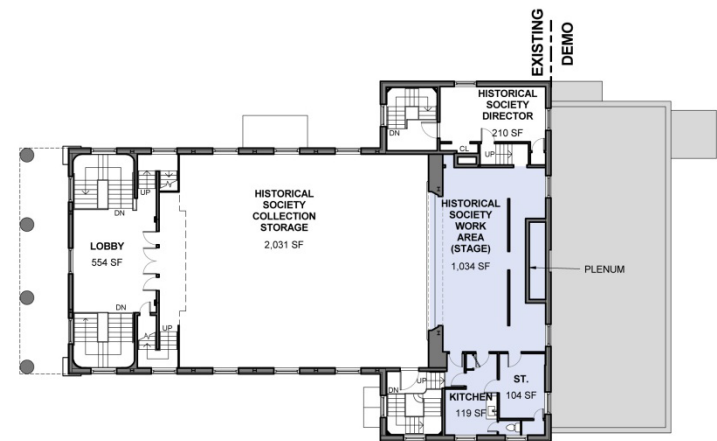
2 EXISTING FIRST FLOOR

Town Offices Second Floor Plan



Total Building Area:	20,660 GSF
Second Floor Area:	6,720 GSF
Second Floor Occupant Load per IBC:	61
Actual Occupant Load for Fixtures:	20

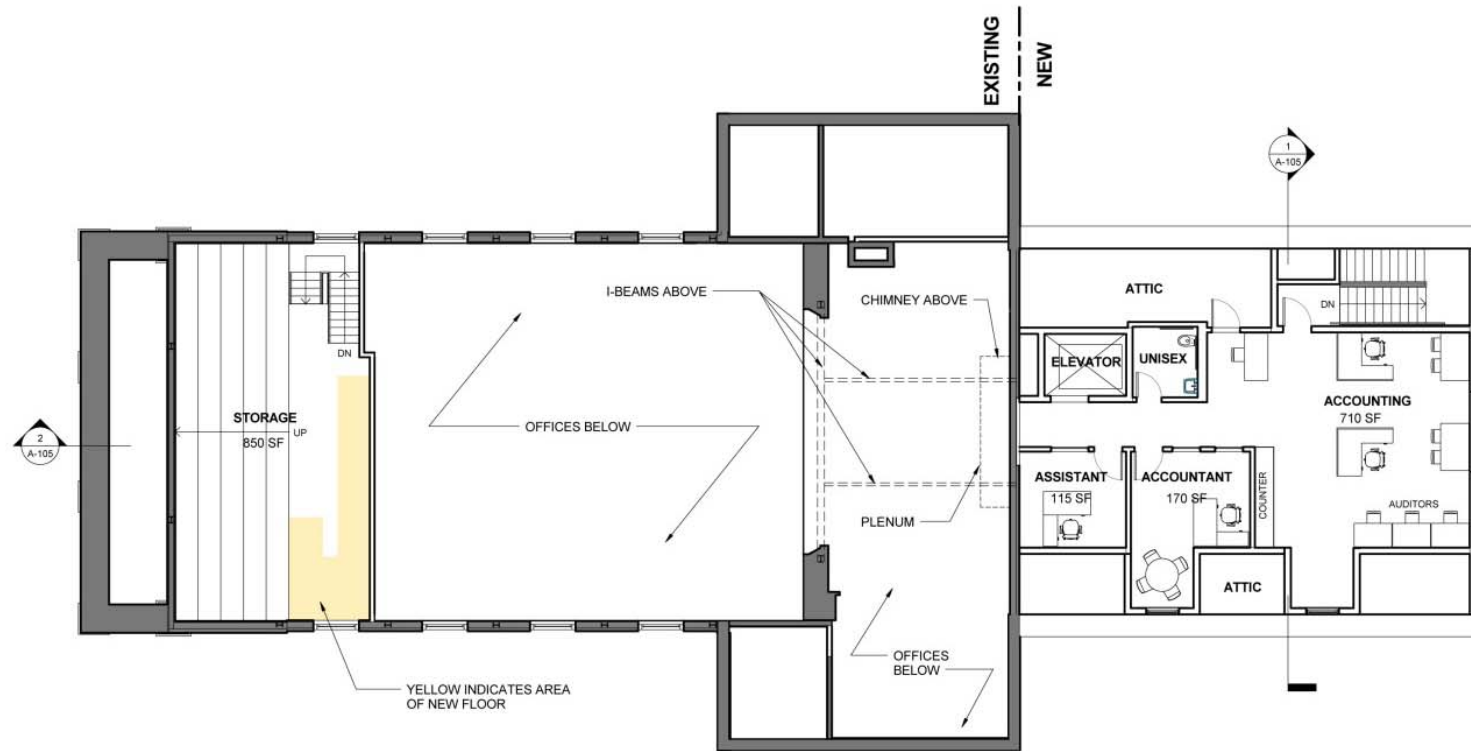
Required Fixture Count Second Floor		
	Toilets/Urinals	Lavs
Female	1	1
Male	1	1



2 EXISTING SECOND FLOOR



Town Offices Third Floor Plan



1 THIRD FLOOR PLAN

Total Building Area: 20,660 GSF

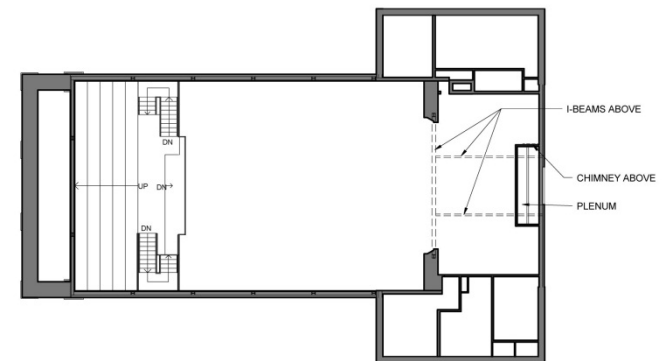
Third Floor Area: 2,310 GSF

Third Floor Occupant Load per IBC 12

Actual Occupant Load for Fixtures: 5

Required Fixture Count Third Floor		
	Toilets/Urinals	Lavs
Unisex	1	1

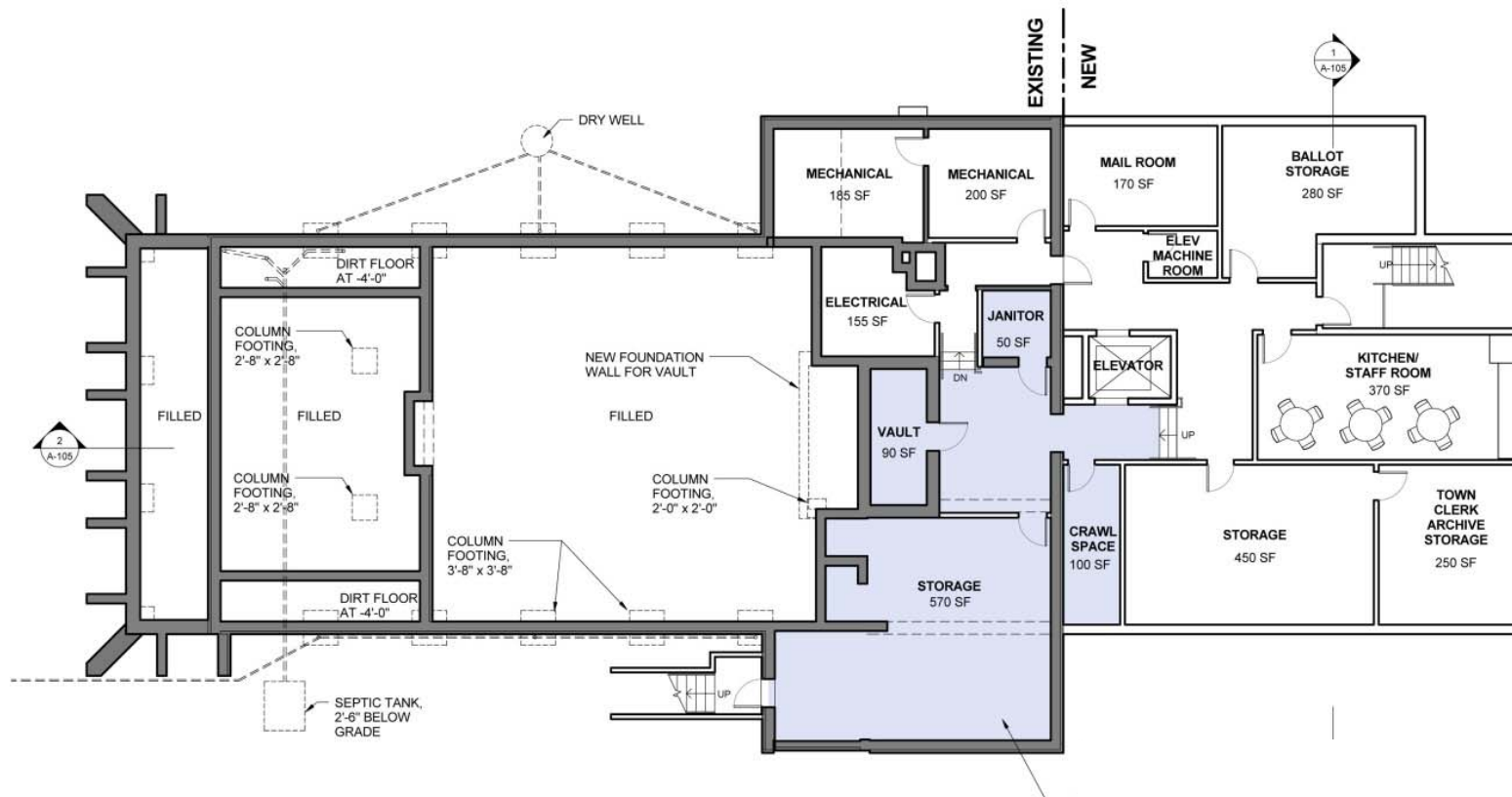
Floor area is under 1,200 sf and not required to have separate restrooms



2 EXISTING BALCONY LEVEL



Town Offices Basement Floor Plan



1 BASEMENT FLOOR PLAN

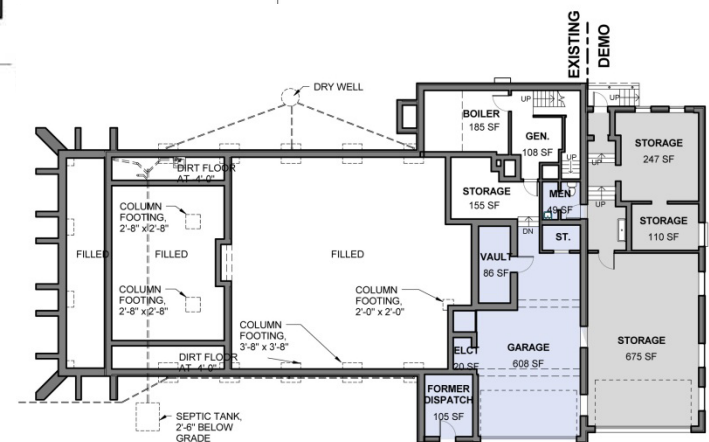
Elevation -10'-0" from First Floor
Elevation -8'-9" in blue area

Total Building Area: 20,660 GSF

Basement Floor Area: 4,430 GSF

Third Floor Occupant Load per IBC 37

Actual Occupant Load for Fixtures: 0



2 EXISTING BASEMENT FLOOR PLAN

Town Offices Entry Perspective



Town Offices View



View from Old Sudbury Road



Existing

School Administration

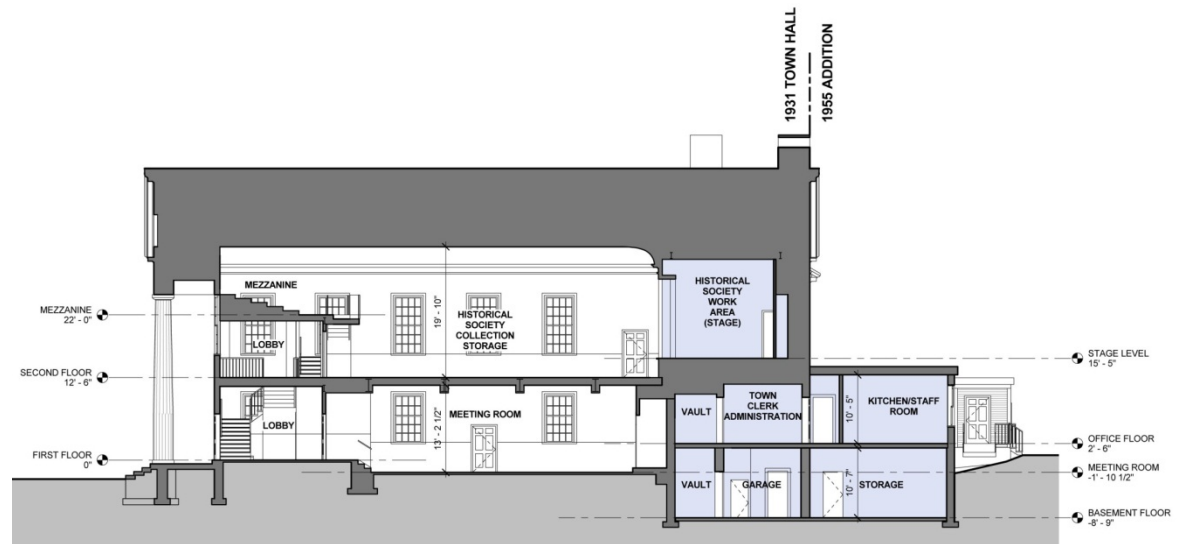
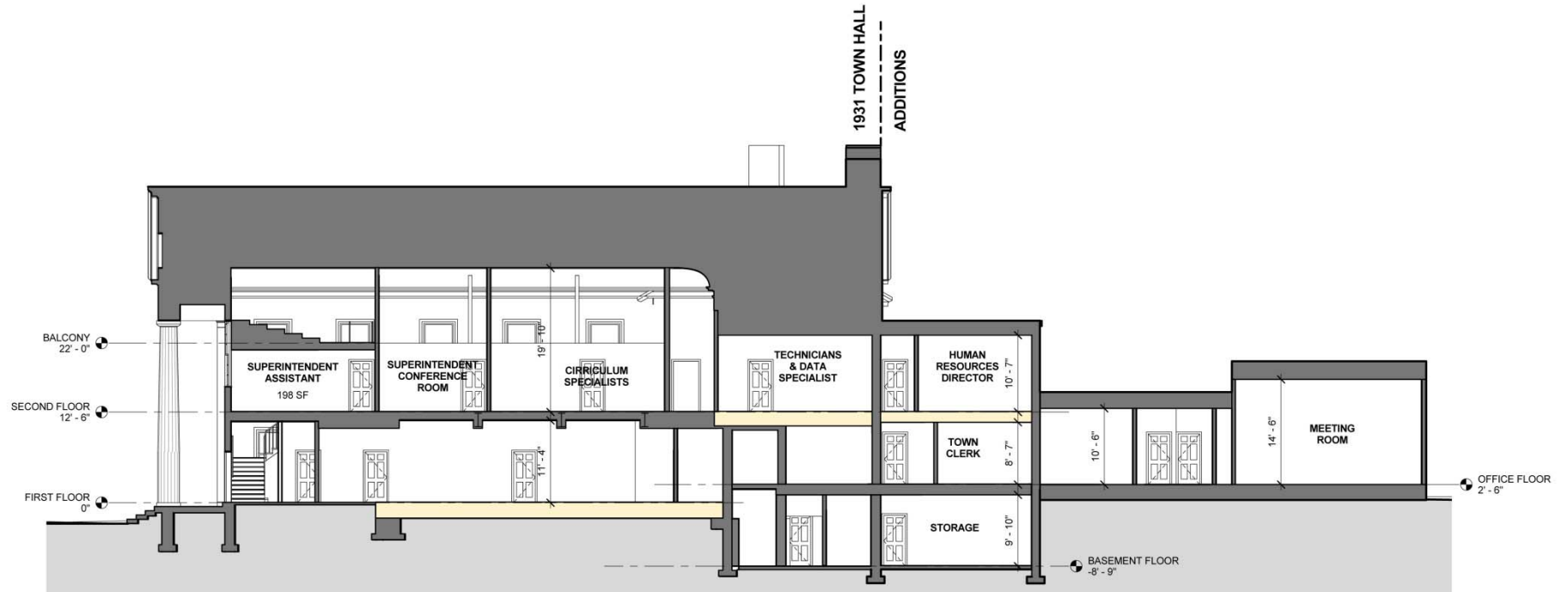
Proposed School Administration Scheme

- Retain existing 1-story rear addition and constructs a second story on top
- Add a new Selectmen/School Committee Meeting Room addition at the rear of the building
- Meet programmatic needs for the School Administration and Town Clerk

School Administration Site Plan

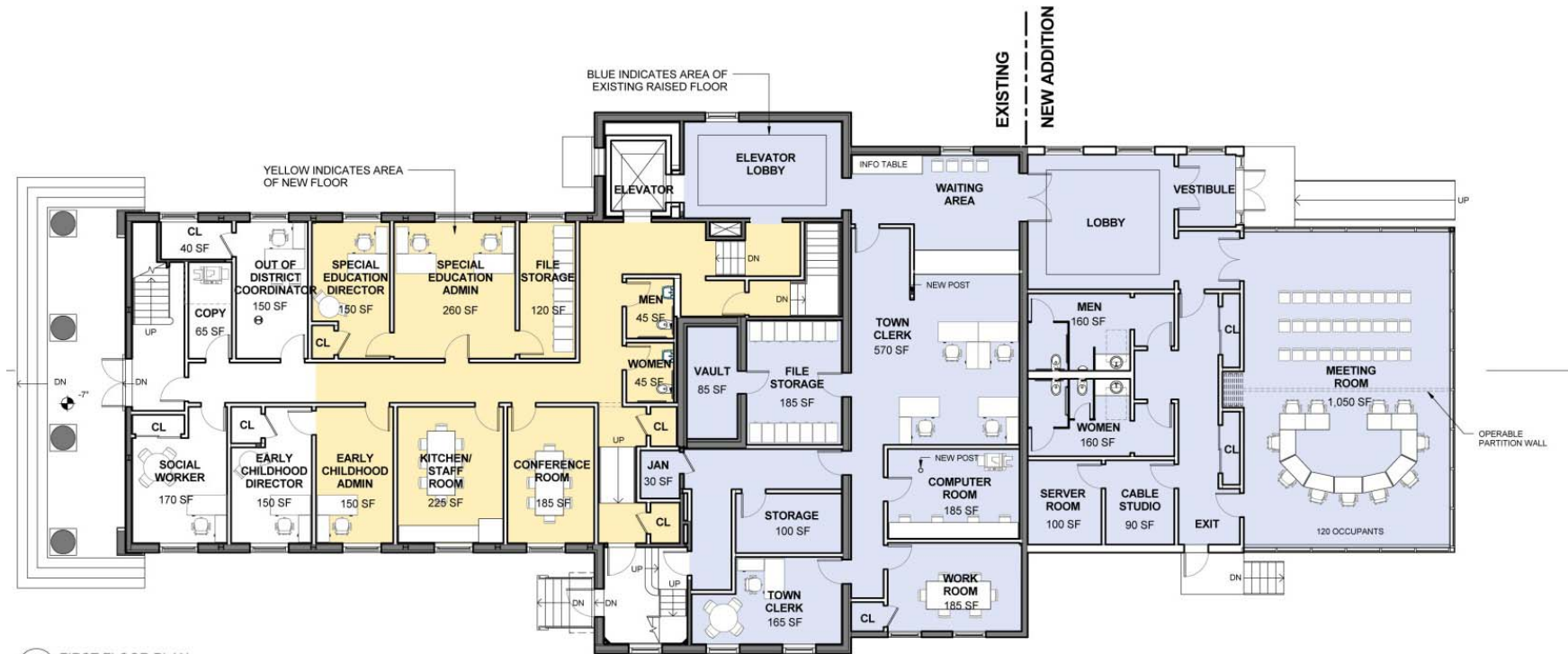


School Administration Section



Existing Section

School Administration First Floor Plan



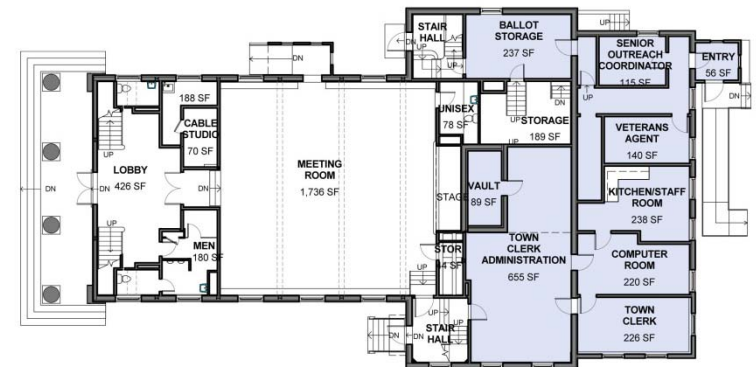
Total Building Area: 18,550 GSF

First Floor Area: 8,490 GSF

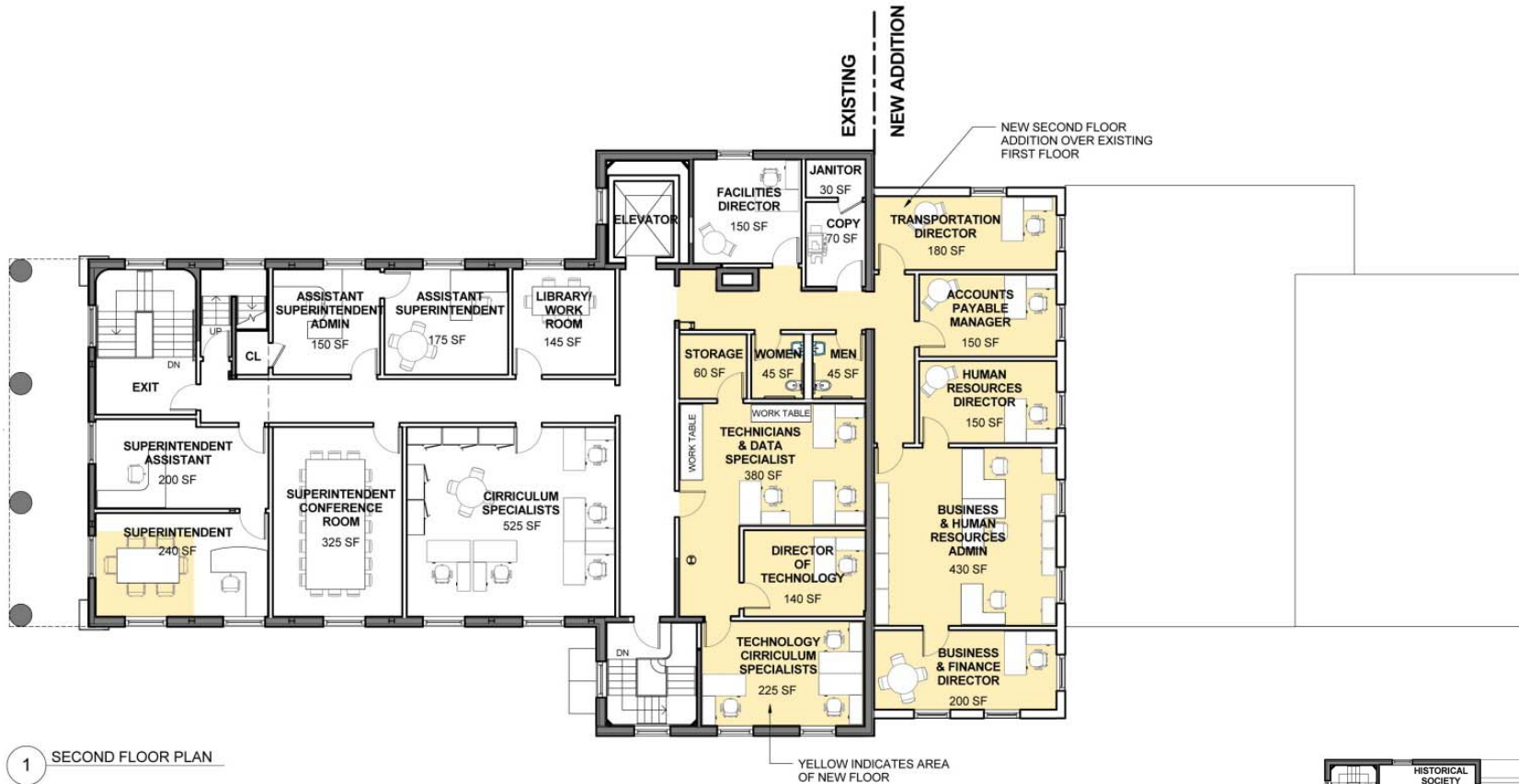
First Floor Occupant Load per IBC: 220

Actual Occupant Load for Fixtures: 132

Required Fixture Count First Floor		
	Toilets/Urinals	Lavs
Female	3	1
Male	1/1	1



School Administration Second Floor Plan



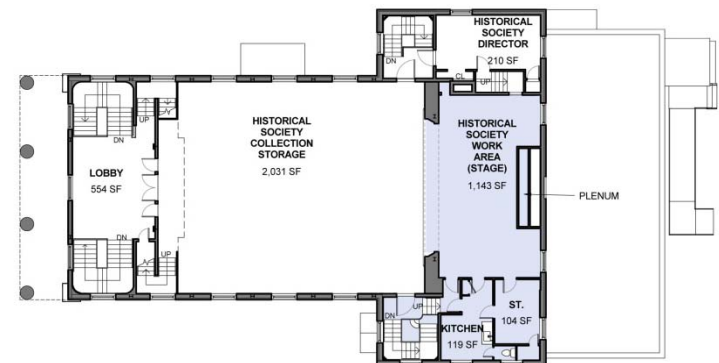
Total Building Area: 18,550 GSF

Second Floor Area: 6,040 GSF

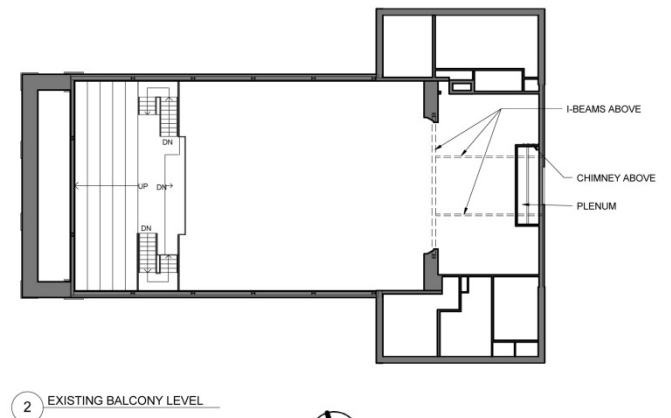
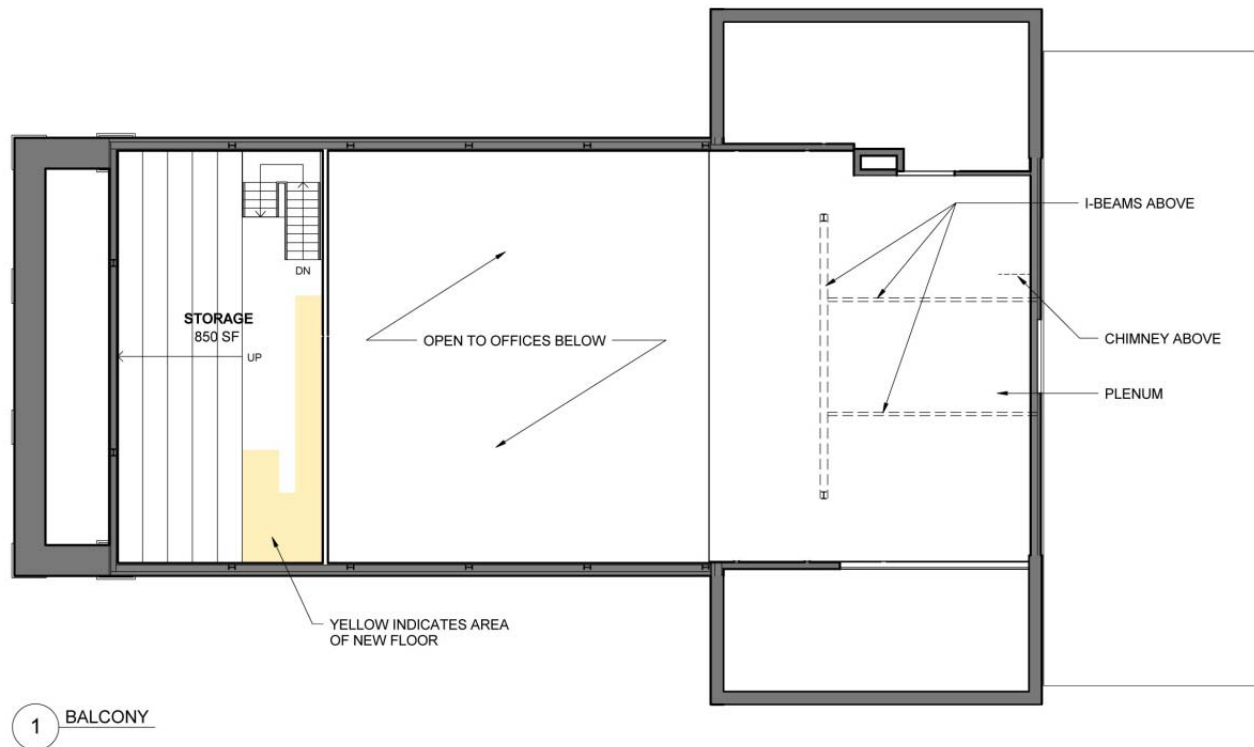
Second Floor Occupant Load per IBC: 90

Actual Occupant Load for Fixtures: 40

Required Fixture Count Second Floor		
	Toilets/Urinals	Lavs
Female	1	1
Male	1	1



School Administration Balcony Floor Plan



Total Building Area: 18,550 GSF

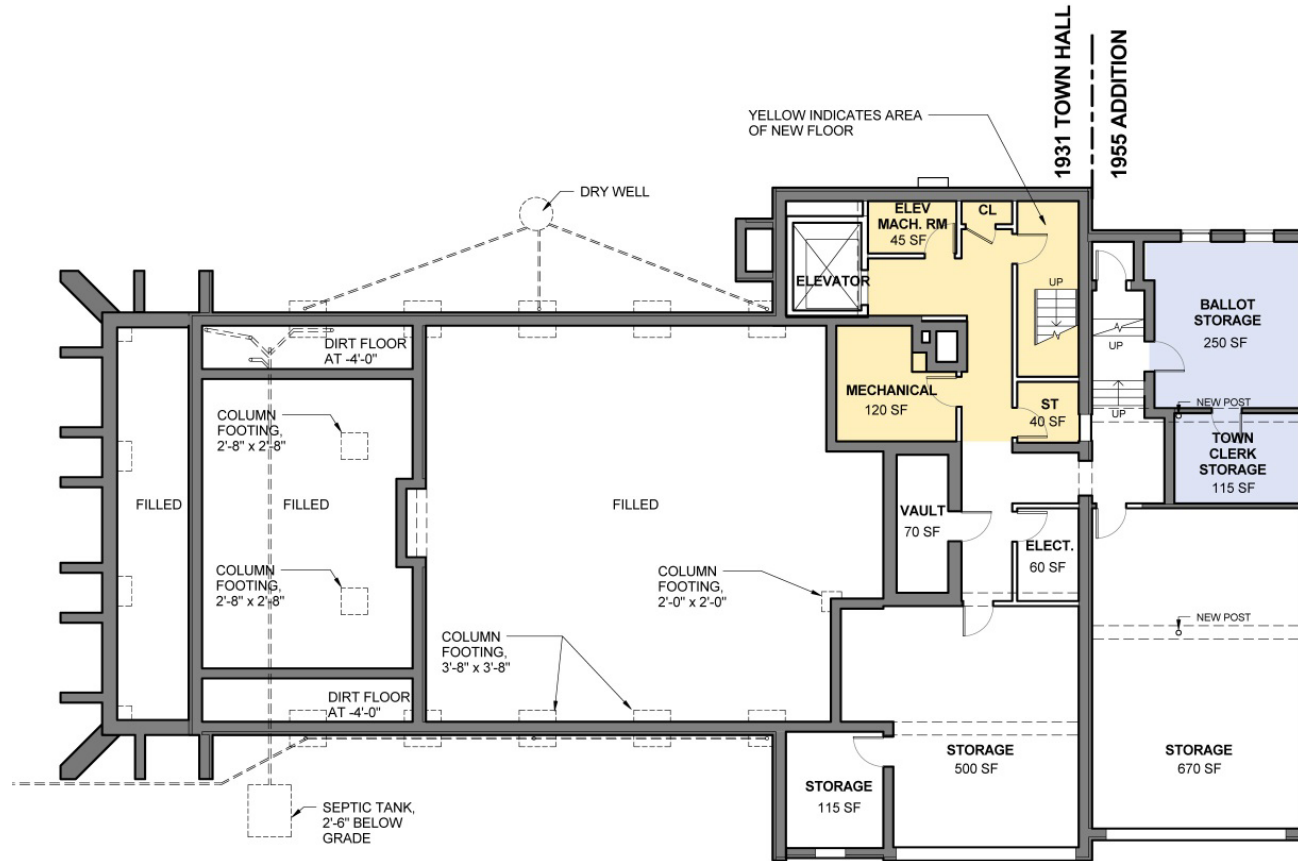
Balcony Floor Area: 850 GSF

Balcony Floor Occupant Load per IBC: 4

Actual Occupant Load for Fixtures: 0



School Administration Basement Floor Plan



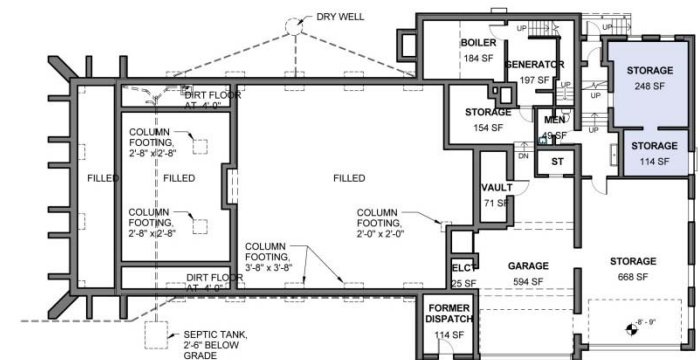
1 BASEMENT FLOOR PLAN

Total Building Area: 18,550 GSF

Basement Floor Area: 3,170 GSF

Basement Floor Occupant Load per IBC: 10

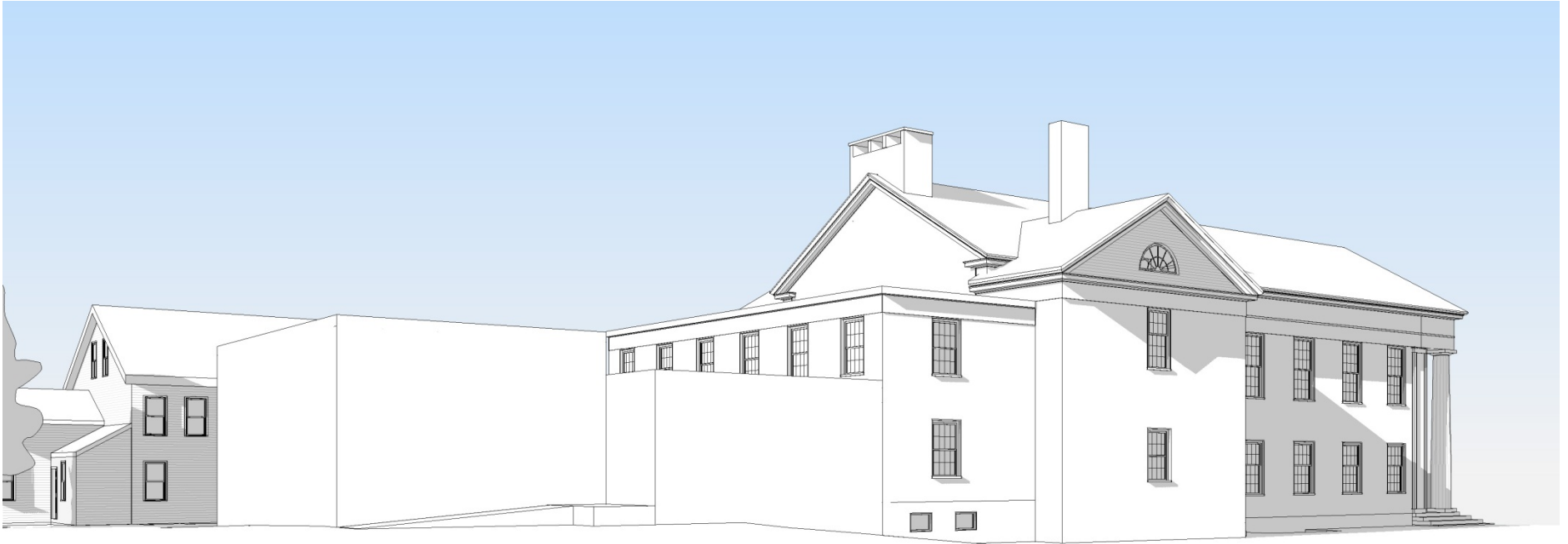
Actual Occupant Load for Fixtures: 0



2 EXISTING BASEMENT FLOOR



School Administration Massing



View from parking lot

School Administration Massing View



View from Old Sudbury Road



Existing

Flynn Conversion for School Administration



Two entrances at Flynn



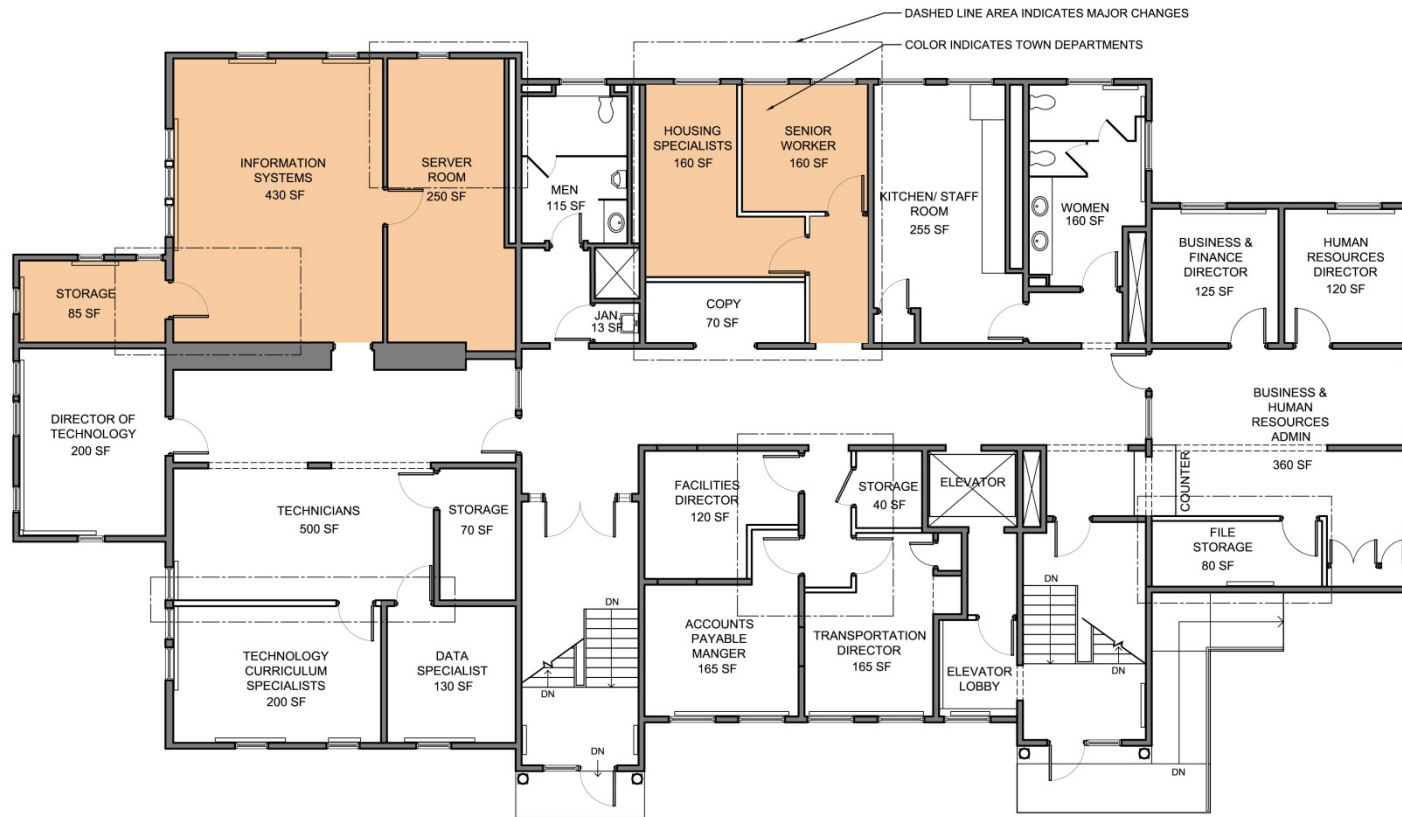
Conference Room



2nd Floor Hallway

Flynn Conversion for School Administration

Scheme 1



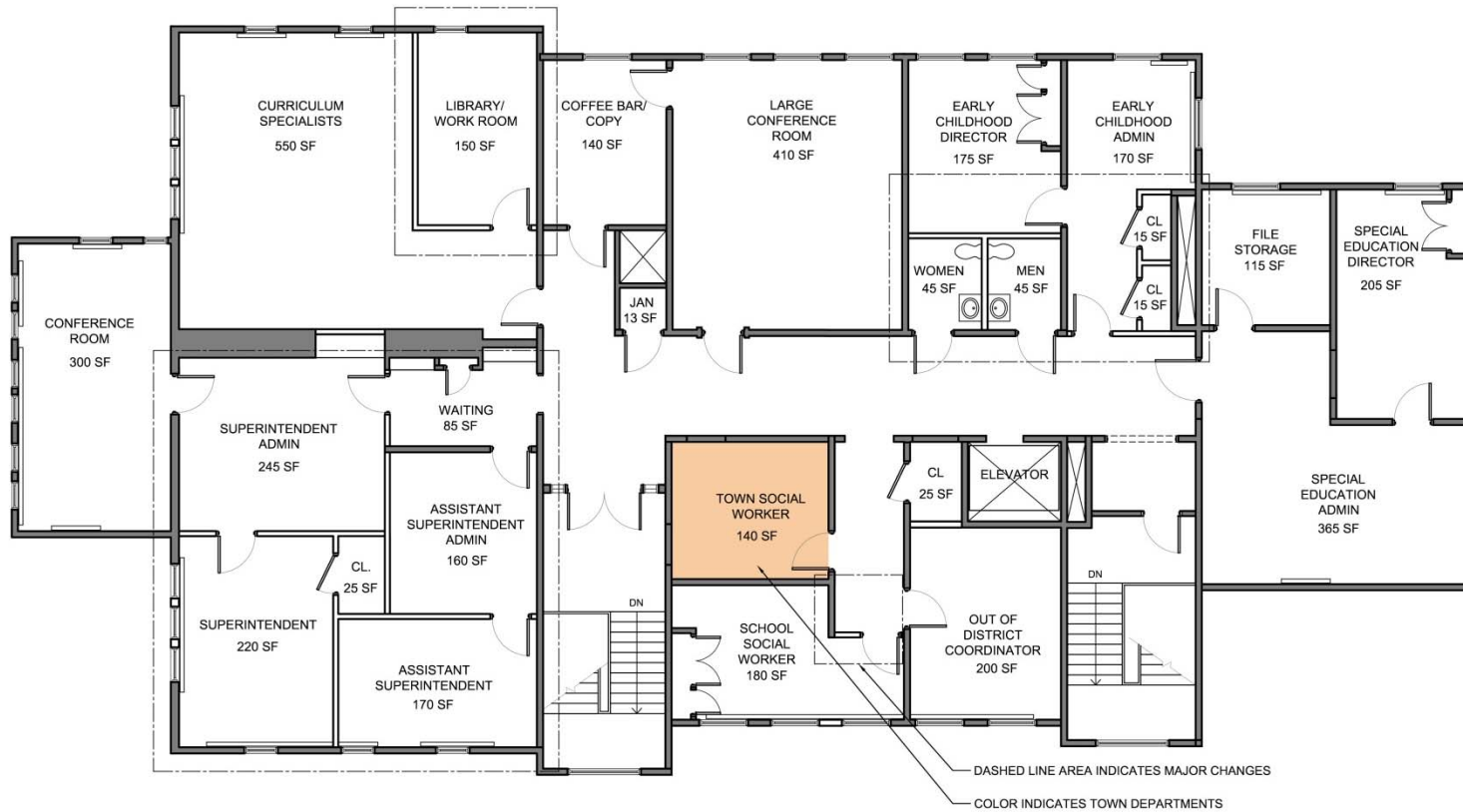
Scheme 1 First Floor Plan



Existing First Floor Plan

Flynn Conversion for School Administration

Scheme 1



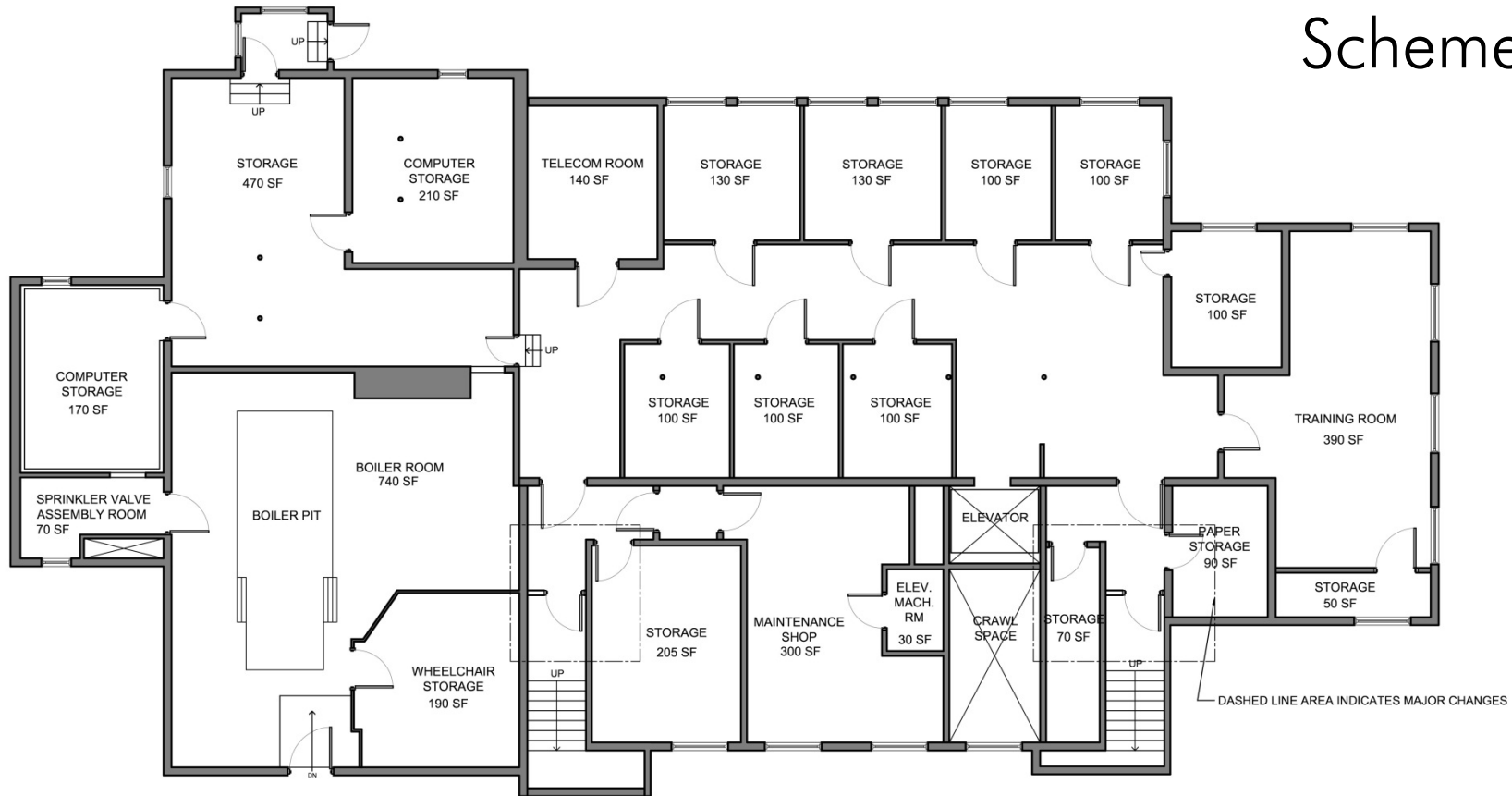
Scheme 1 Second Floor Plan



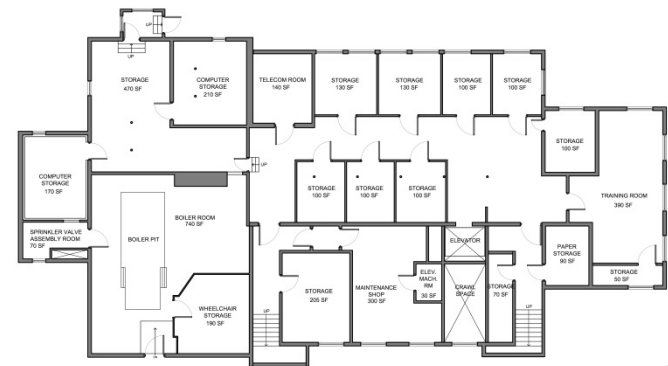
Existing Second Floor Plan

Flynn Conversion for School Administration

Scheme 1 & 2



Scheme 1 & 2 Basement Floor Plan

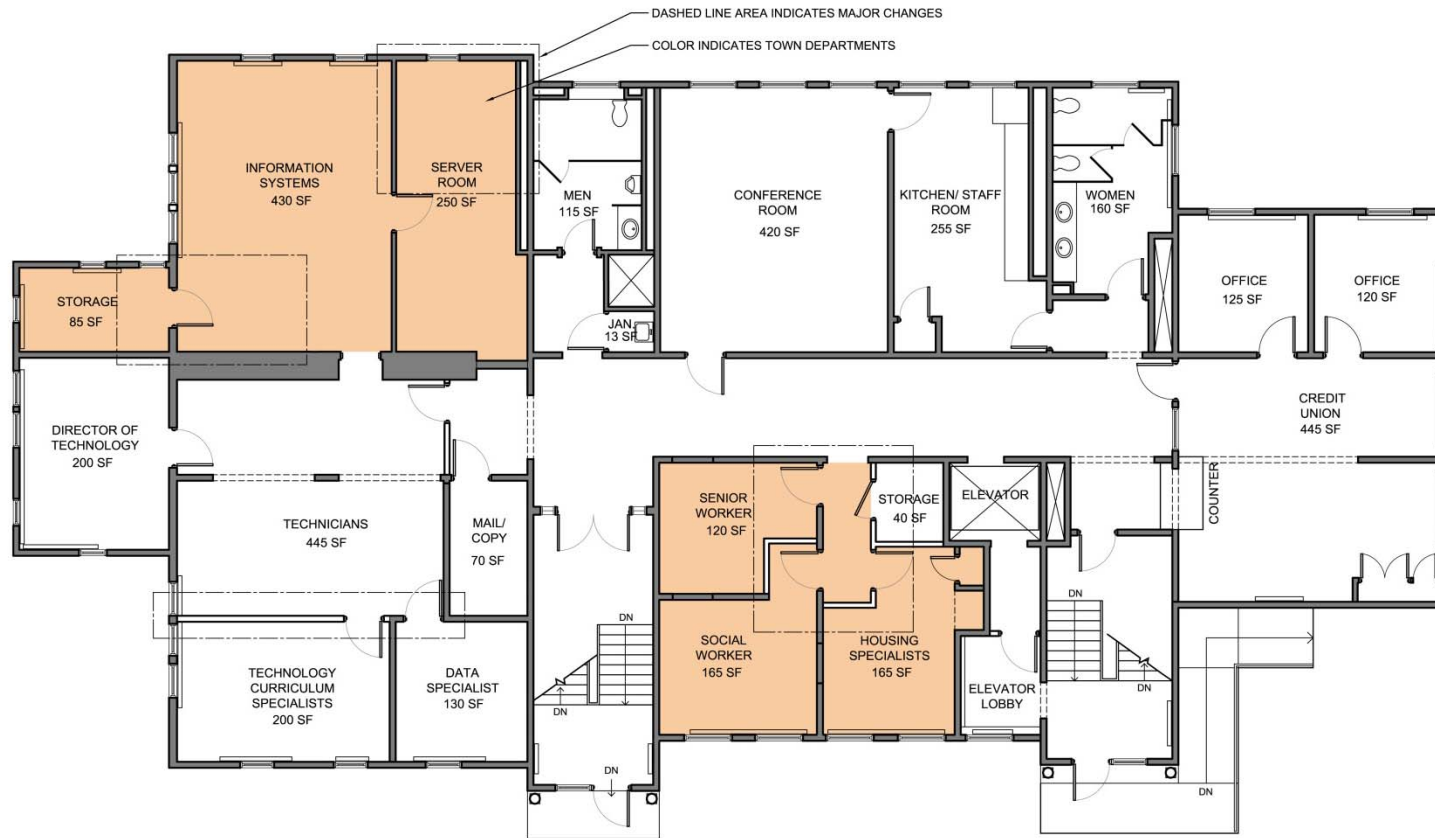


Existing Basement Floor Plan

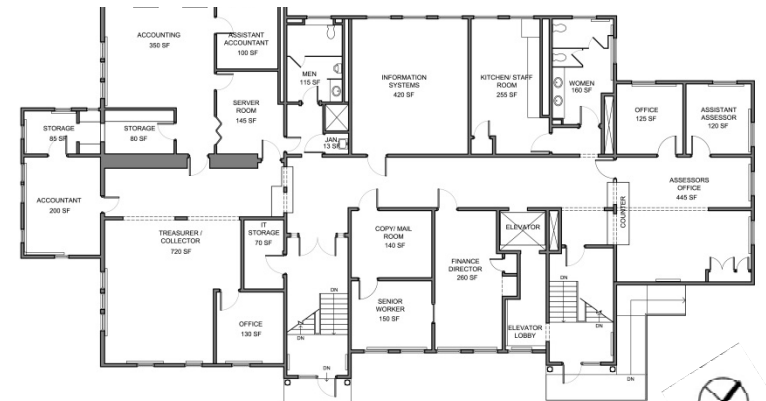


Flynn Conversion for School Administration

Scheme 2



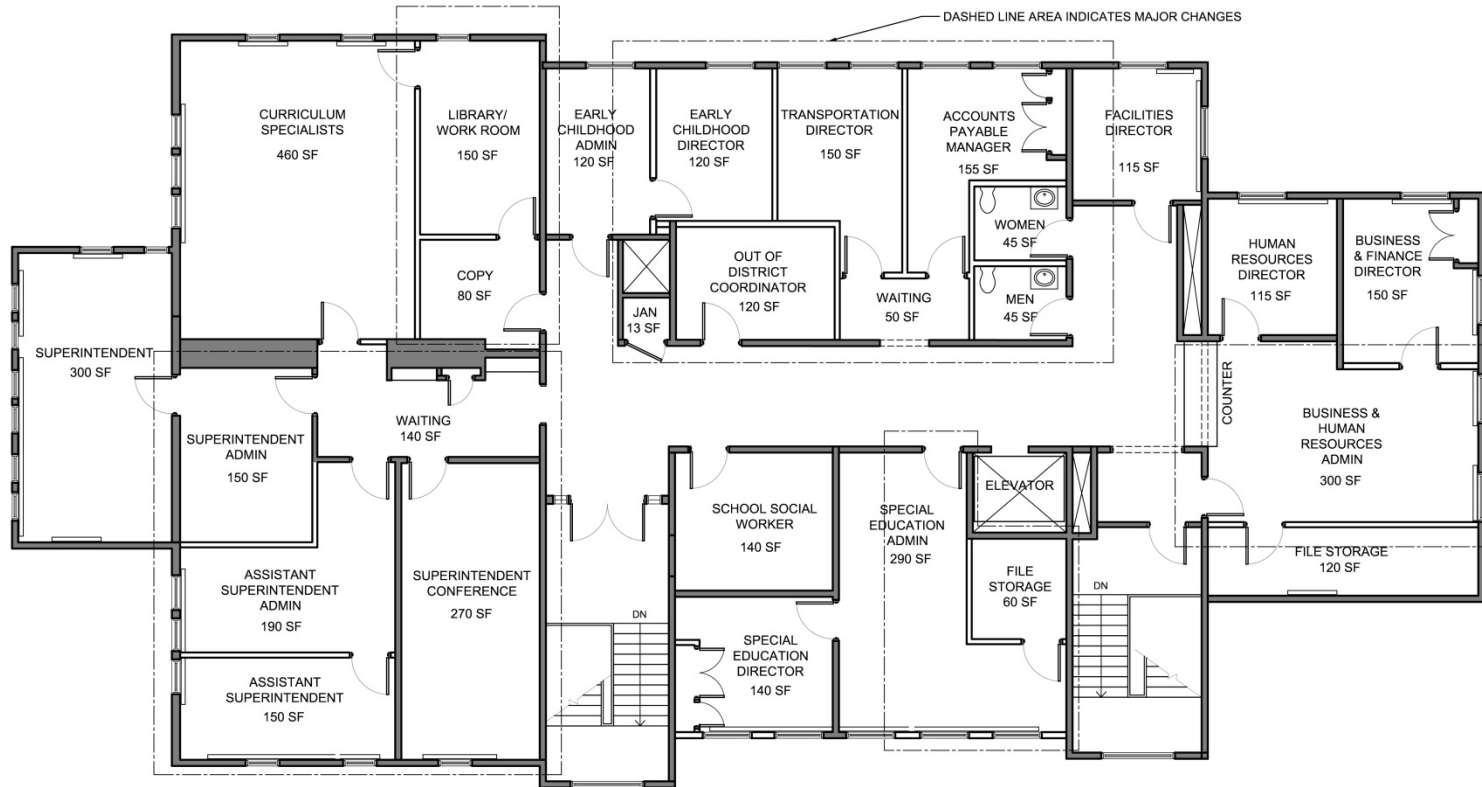
Scheme 2 First Floor Plan



Existing First Floor Plan

Flynn Conversion for School Administration

Scheme 2



Scheme 2 Second Floor Plan



Existing Second Floor Plan

Flynn Conversion for School Administration

	Scheme 1	Scheme 2
Pros	<ul style="list-style-type: none">• Minimal change to the existing interior layout.• Retains large conference room on 2nd floor• Combine Town and School Technology Department	<ul style="list-style-type: none">• School Admin offices together on second floor• Extra space for Credit Union on first floor• Combined Town and School Technology Department
Cons	<ul style="list-style-type: none">• Business and Finance on separate floor from Special Education and Superintendents• No extra space for other Town Departments such as Credit Union	<ul style="list-style-type: none">• Additional demolition and new construction of interior walls• Smaller offices• Large Conference room on first floor

Conceptual Schemes

Scheme: Renovate to Consolidate Floor Levels with New Addition

1. Town Offices
2. School Administration

Scheme: CPA Renovation with no Addition

Brings the building up to current codes (excludes seismic) without an established program.

Scheme: Demolish Existing Town Hall and rebuild without level changes

Provide a new building for the Town Offices or School Administration using the required area and efficient space planning that the current building can not provide.

Conceptual Schemes Pros & Cons

scheme	Renovate to consolidate floor levels with new Addition		CPA Renovation, No Addition	Demolish Existing and Rebuild
program	Town Offices Scheme 2	School Admin Scheme 2	tbd	Town Offices & School Admin
Pros	<ul style="list-style-type: none"> • Space for the Town Offices • Town Offices and government are associated with the Town Hall building • CPA funding 	<ul style="list-style-type: none"> • Space for the School Administration • CPA funding 	<ul style="list-style-type: none"> • Lower renovation cost with more flexibility for program space • CPA funding 	<ul style="list-style-type: none"> • Smaller building • Costs are similar to renovation costs • Can meet all code requirements
Cons	<ul style="list-style-type: none"> • Provides a large addition • High total project cost • Requires more area due to inefficiencies in existing building 	<ul style="list-style-type: none"> • Large addition for meeting room • Town Offices and School Admin in same building • The School Admin is associated with the Town Hall • Requires more area due to inefficiencies in existing building 	<ul style="list-style-type: none"> • Still has a high total project cost • No determined program 	<ul style="list-style-type: none"> • No CPA funding for the project. • Could receive negative support from officials and residents.

Estimated Project Cost Summary

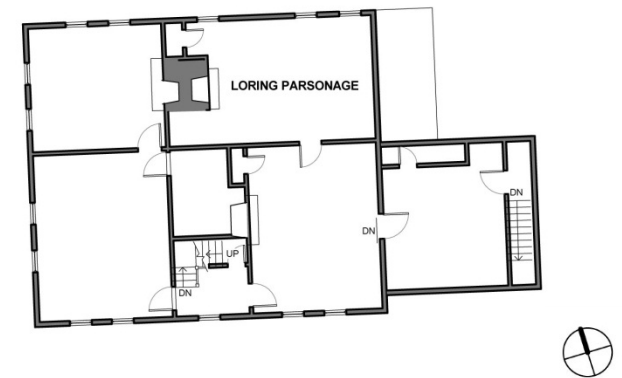
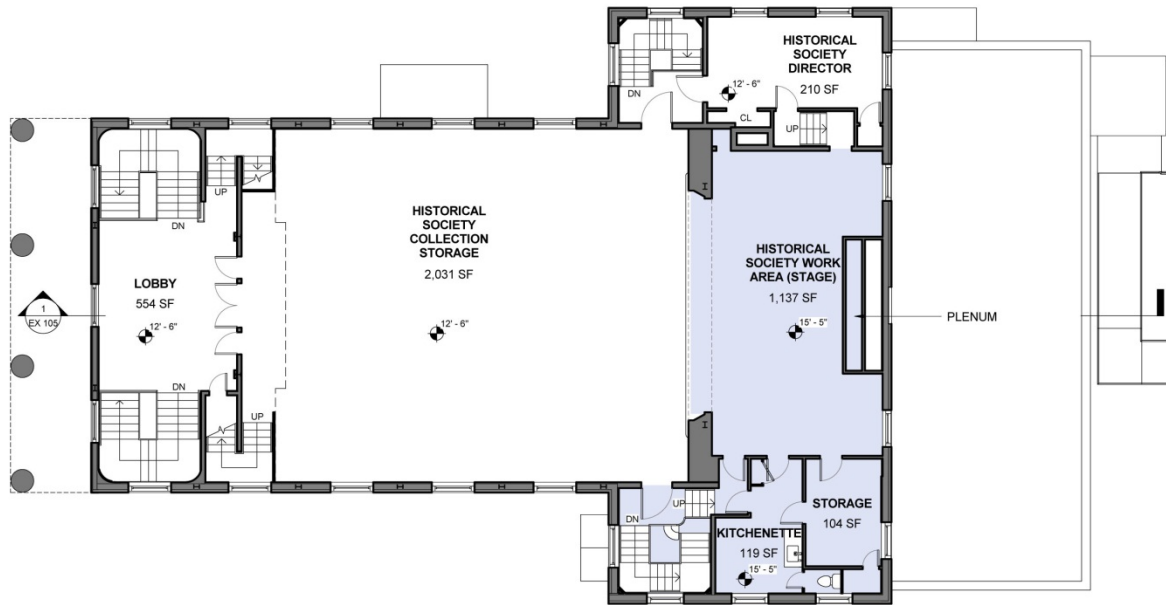
scheme	Renovate to consolidate floor levels with New Addition		CPA Renovation	Demolish Existing & Rebuild without level changes
program	Town Offices Scheme 2	School Admin Scheme 2	tbd	Town Offices
gross area	20,660 sf	18,550 sf	14,700 sf	16,700 sf
construction cost	\$7.80 m	\$6.40 m	\$4.30 m	\$7.10 m
soft cost	\$1.32 m	\$1.16 m	\$0.87 m	\$1.20 m
contingency	\$0.90 m	\$0.75 m	\$0.52 m	\$0.80 m
Total Cost	\$10.0 m	\$8.3 m	\$5.7 m	\$9.1 m
Breakdown of Costs				
base building with site utilities	\$5.70 m	\$5.70 m		
interior fit-out	\$0.40 m	\$0.40 m		
addition	\$3.30 m	\$1.60 m		
sitework	\$0.60 m	\$0.60 m		

Questions or Comments

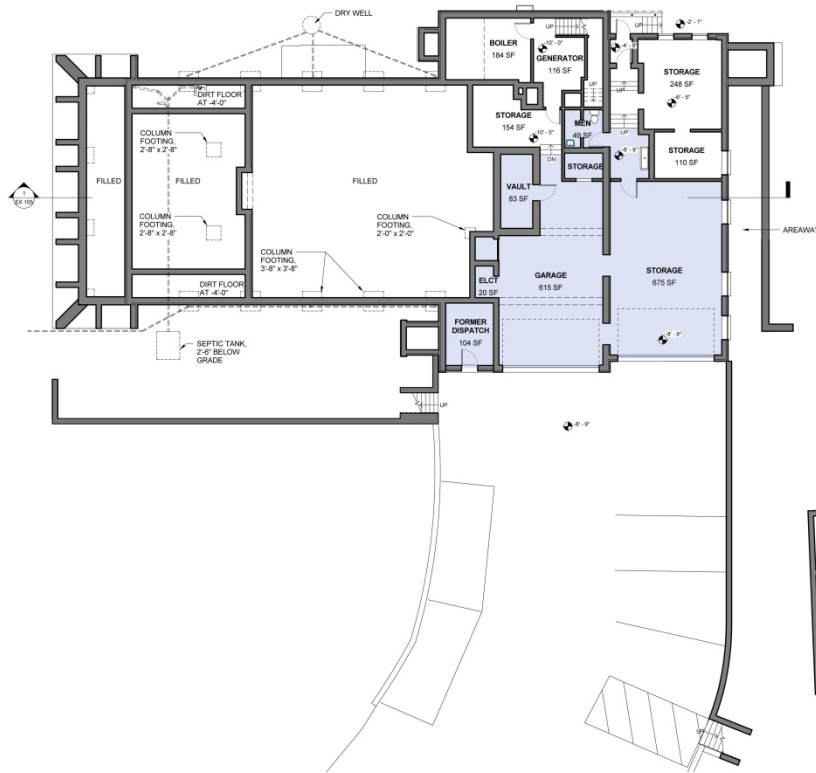




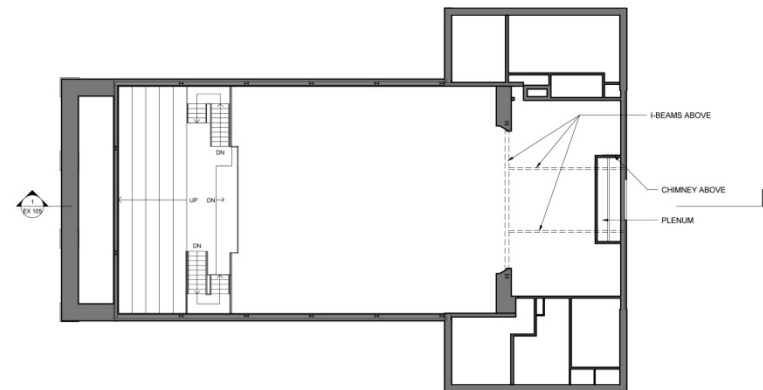
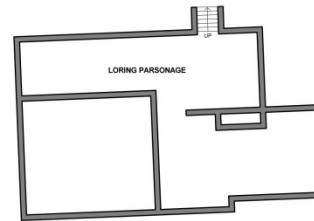
Existing Second Floor Plan



Existing Basement & Mezzanine Floor Plans



Basement Floor



Mezzanine Floor

