WILLIAMS MEMEORIAL

Building Study Report

January 14, 2022

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TABLE OF CONTENTS

SECTION I – EXISTING CONDITIONS AND RECOMMENDATIONS 2

Architectural 3

Existing 3

Proposed Option 1 4

Proposed Option 2 6

Fire Protection 8

Existing 8

Proposed Option 1 & 2 8

Plumbing 9

Existing 9

Proposed Option 1 9

Proposed Option 2 9

Mechanical 11

Existing 11

New Proposed System 12

Electrical 13

Existing 13

Proposed Option 1 14

Proposed Option 2 15

Alternate 1 16

SECTION II – FLOOR PLANS 17

Existing 17

SECTION III - ESTIMATES 28

Option 1 Preliminary Design Estimate 28

Option 2 Preliminary Design Estimate 32

SECTION IV - PHOTOGRAPHS 36

SECTION VI - CONCLUSION 39

Preliminary Proposed Schedule 39

SECTION I – EXISTING CONDITIONS AND RECOMMENDATIONS

Williams Memorial Building sits facing Main Street between the Town Hall and the Academy Building/Parks and Recreation Department. The masonry structure was constructed in 1915, the original structure of Academy School. It was used as a recreation center and as a gymnasium facility. When last a school, it housed a school library in the main space and an art room on the lower level. It was no longer used as a school in since 2001. Since then, the lower level has been converted into the Teen Center and the main space is utilized essentially as a storage room. The purpose of this study is to review the main space for its conversion into a Multipurpose space that can provide multiple functions while accommodating the Council Chambers.

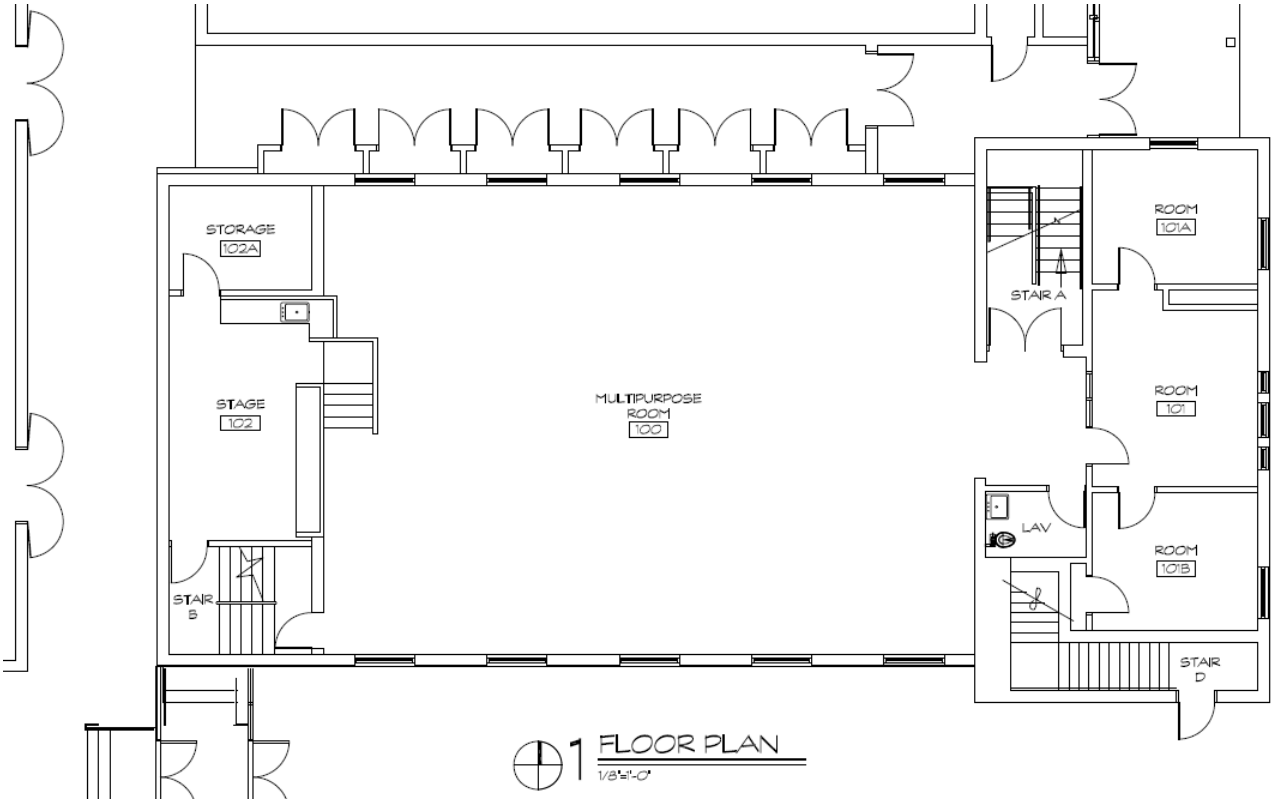
Architects and Engineers reviewed the existing facility. The layout, materials, construction and building systems were reviewed. These were all assessed with the consideration of renovations. Preliminary Design options incorporate two proposed layouts with considerations for the building system improvements. Estimates are then developed based off these recommendations.

Architectural

Existing

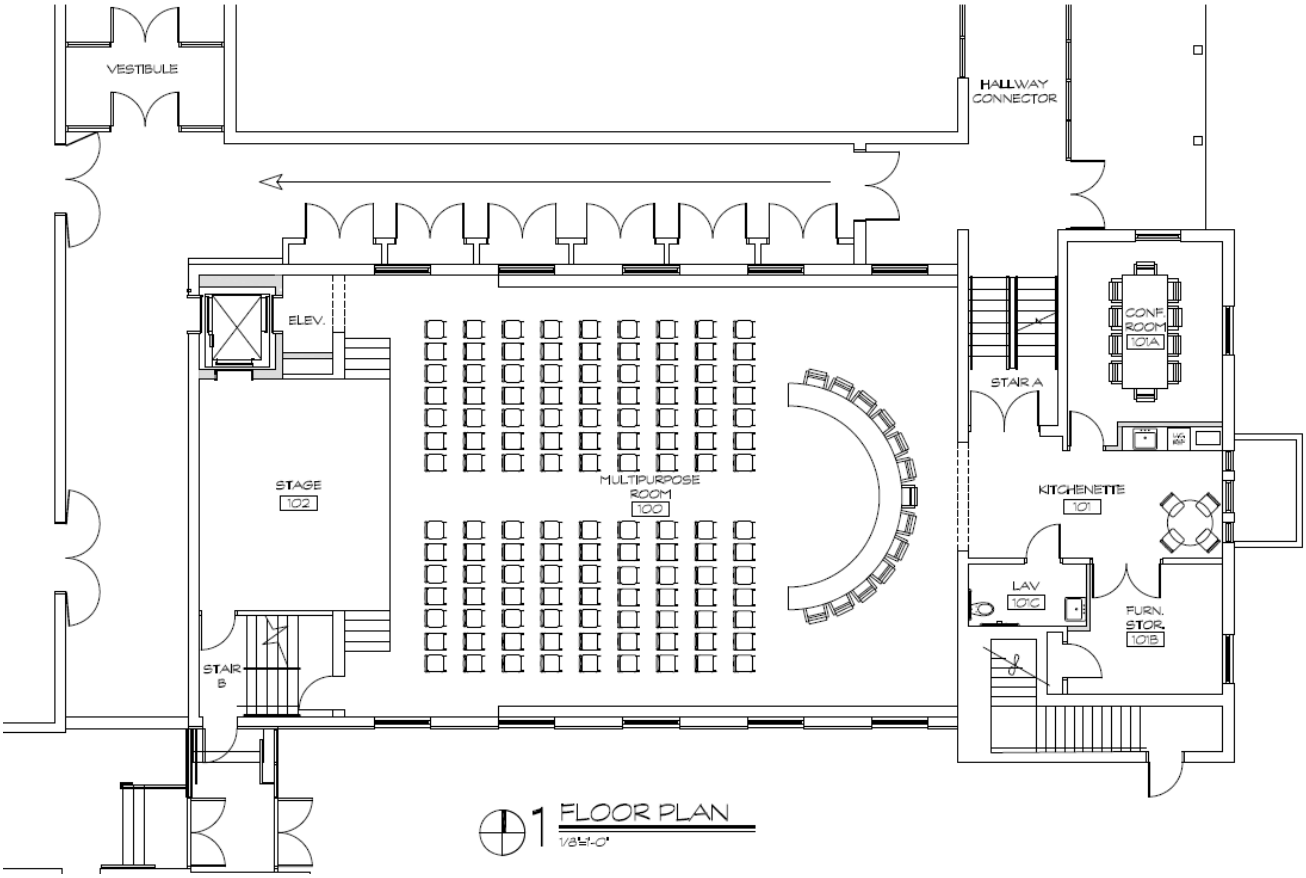
The masonry structure consists of three levels with the Teen Center on the lowest garden story level, the open multipurpose space and stage on the main level and as small portion of offices at the third level. Each level is accessed by two stairways, but there is no elevator. However, the Teen Center does have a small but antiquated lift. There is no accessibility to the main space, its stage, or the upper level. The upper level will continue to be used as storage and therefore does not necessitate the need for elevator access.

The main space consists of painted brick walls with a paneled system on the lower portion of the walls. The walls in the support rooms to the East are constructed of plaster and sheetrock with some areas not finished. In general, the walls are in good condition with the need for repainting. There are large Palladian windows on both sides. These windows are not original but don't appear in the best condition and should be considered for replacement. There is a dated acoustical spline ceiling throughout most of the space including the support spaces. Some areas are beginning to fall apart. New ceilings are needed throughout. The stage has been retrofitted over the years and includes some casework and a sink. The 9x9 floor tiles on the stage indicate asbestos flooring. The stage could use some rework to restore it to a traditional stage. Overall, the space is in fair condition.



Proposed Option 1

Option 1 is concept where an elevator would create access to 4 levels, Teen Center, main hallway, Multipurpose space, and the stage. This elevator would require doors on 3 sides so that access to all these levels could be achievable. The best location would be to locate this elevator where the stairs to the Teen Center are which would require them to be rebuilt as shown on the floor plan. The storage room next to the stage would be converted into the elevator shaft. The stairs to the stage would be reorganized in a more traditional manner and could be included on both sides and incorporate a new wood floor. The main space would be renovated with new finishes that aid in good acoustics such as carpeting on the floor and dropped ceiling clouds. The walls would be repainted, and acoustical wall panels incorporated. The rooms to the east would be reconfigured to mee the needs of the space. The central space is opened to the room where a kitchenette would be placed and possibly a small table to serve refreshments during an event. To the north a conference room used for executive sessions and other small or private meetings would be incorporated. To the south a furniture storage room would house all the chairs and tables needed to accommodate the flexibility of the room. Additionally, an existing restroom would simply be reworked, the sink relocated to the opposite wall and expanded to accommodate an accessible restroom.



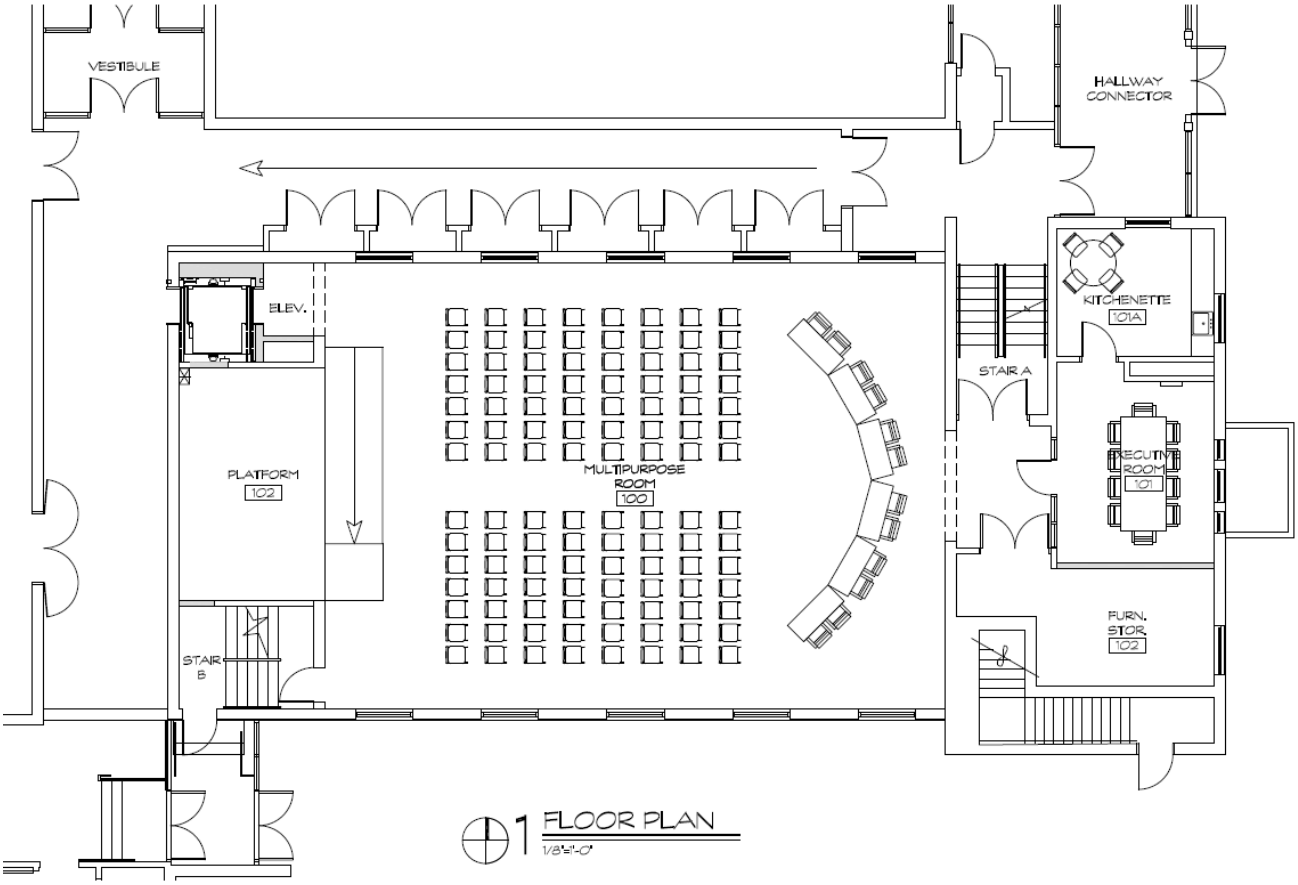
The Teen Center will need small modifications to incorporate the elevator. Some casework in front of the elevator will be removed to create the necessary clearances. The stairs would be relocated. Another potential option could be to open Stair B to the space and eliminate the need for rebuilding.

Furthermore, this plan addresses an enclosed connection to the Town Hall. At the North there is what once may have been a corridor connection. This has since been converted into a storage room. This concept removes the walls to provide a connection to the Town Hall. Additionally, the vestibule to the north is called out as an Alternate. This scope incorporates expanding the vestibule to meet the code minimum of 7 feet clearance between the sets of doors. It incorporates new aluminum storefront windows and doors at both the interior and exterior.

Proposed Option 2

Option 2 is concept where an elevator would create access to 3 levels, Teen Center, main hallway, and Multipurpose space. Here the stage would be reduced to a platform accessed by a ramp. The surround would remain. This eliminated the need for a 4 stop 3 door elevator and only requires a 3 stop 2 door elevator. The shaft is in the same space and has the same ramifications to the Teen Center.

The main space would be treated the same as Option 1. It will be renovated with same finishes and acoustical treatments: carpeting, dropped ceiling clouds, acoustical wall panels and a fresh coat of paint. The rooms to the east are reconfigured similarly. However, there is no open space in the center. Instead, the conference room /executive session room is in the center. An enclosed Kitchenette is off this room to the north. The restroom is removed and the furniture storage room to the south is accessed in through its location.



This plan addresses an enclosed connection to the Town Hall in a different way. The storage room remains as is. Instead, the exterior canopy would be enclosed to an interior corridor with an aluminum storefront system. The vestibule to the north is called out as an Alternate and remains the same.

Overall, both floor plans provided will accommodate the accessibility required for everyone to use the space. It will accommodate a Council Chambers with and executive session space but also provide the community with a multipurpose space with rich history fit for a multitude of uses.

Fire Protection

Existing

The existing facility is covered by a dry pipe sprinkler system with adequate coverage per NFPA 13.

Proposed Option 1 & 2

Remove existing heads in all areas of work and the new sprinkler system shall cover all renovated areas and be extended into the new additions. Provide all new dry sprinkler heads throughout the area of renovation per the new architectural layout. Provide concealed pendent dry barrel sprinkler heads in areas with ceilings and upright sprinkler heads in exposed areas. Provide all piping, fitting, hangers etc. in support of new architectural program installed in accordance with NFPA 13 and the local AHJ.

Specific installation requirements will be coordinated with local water authority requirements and the contractor will provide hydraulic calculations based on the results of a flow test involving local site fire hydrants.

Dry Piping shall be schedule 40 galvanized steel pipe and threaded fittings for use with pipe 2" and smaller. Schedule 10 pipe and roll grooved fittings for 2-1/2" and larger. Sprinkler heads shall be UL listed and/or FM approved automatic type, of proper temperature range, with installation meeting the conditions of listing and approval. Deflectors shall be marked to indicate proper installation position. Layout and design will comply with local and State codes along with NFPA standards will be required.

Plumbing

Existing

The existing facility is provided with a hand sink on the stage and a bathroom with a sink and toilet. These fixtures will all require demolition and depending on the option, also replacing. Therefore, all piping, fixtures, and plumbing equipment shall be removed and disposed of per new architectural layout. There is an existing hot water heater that will be replaced with a larger unit to handle the new kitchenette load.

Proposed Option 1

Remove sink and associated trim and piping from existing stage. Cut and cap piping back to main plumbing riser. New bathroom sink will be installed in new location based on architectural floor plan. New toilet will be located on existing rough in. New kitchenette will include sink and under counter refrigerator. New drain, water, and vent piping will connect back to closest existing risers. Hot water demands will be met with a new 40 gallon hot water heater. Provide a 40 gallon water heater with thermal expansion tank, all equipment shall be sized to handle the anticipated demands.

Store domestic hot water at 140°F to reduce the growth of legionella. To eliminate potential scald hazards provide a properly sized thermostatic mixing valve to deliver the required temperature per the following criteria:

- Master Mixer, all water heaters require external temperature controls via ASSE 1017 Thermostatic mixing valve to reduce hot water from 140°F to 120°F.
- Hand washing lavatories (bathroom groups) require Tempered water via ASSE 1070 Thermostatic mixing valve to provide 105°F – 110°F water.

Hot water will be distributed at 120°F to all plumbing fixtures throughout the facility. To maintain hot water temperature to remote fixtures a new hot water recirculation system will be provided, including a recirculation pump, time clock, aqua-stat and associated piping.

All plumbing work shall comply with State and local codes along with the latest edition of the International Plumbing Code.

Proposed Option 2

Remove sink and associated trim and piping from existing stage. Cut and cap piping back to main plumbing riser. Remove old toilet, sink and associated trim and piping. Cut and cap piping back to main plumbing riser. New kitchenette will include sink and under counter refrigerator. New drain, water, and vent piping will connect back to closest existing risers. Hot water demands will be met with a new 40 gallon hot water heater. Provide a 40 gallon water heater with thermal expansion tank, all equipment shall be sized to handle the anticipated demands.

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Hot water will be distributed at 120°F to all plumbing fixtures throughout the facility. To maintain hot water temperature to remote fixtures a new hot water recirculation system will be provided, including a recirculation pump, time clock, aqua-stat and associated piping.

All plumbing work shall comply with State and local codes along with the latest edition of the International Plumbing Code.

Mechanical

Existing

General:

The systems will be designed in accordance with the State Building Code which include the following.

2018 International Building Code, 2018 International Mechanical Code, 2018 International Plumbing Code, International Energy Conservation Code as well. The systems will also be designed in accordance with the applicable provisions of the Connecticut Fire Safety Code and other applicable standards, ordinances and regulations.

Design Conditions

The HVAC systems will be designed to meet the following design criteria:

Basic Design Parameters:

Building Location:	Glastonbury, CT
Weather Station:	Hartford, CT

	Summer	Winter
Outdoor Design Conditions	91° F db / 72° F wb	3° F db
Indoor Design Conditions	75° F db	72° F db
Indoor Relative Humidity:	50% +/- 10%	

Existing HVAC System:

The Heating for the existing building is provided via a central hot water distribution system from the central boiler plant with hot water finned tube baseboard along the perimeter of the building. The existing boilers and hydronic pumps were replaced approximately 5 years aga with base mounted pumps and two high efficiency condensing boilers.

Although not part of this project's current scope, the existing building facility is currently being controlled by pneumatic controls system. A new central Building Management System (BMS) should be considered.

Existing Ventilation:

The existing ventilation is being provided by an existing exhaust fan located in the attic. The new ventilation equipment will meet the current code requirements for the new renovated spaces.

New Proposed System

We propose that the new HVAC system serving the multipurpose room, executive room, kitchenette and furniture storage to be a variable refrigerant flow (VRF) system that provides heating and air conditioning using one outdoor condensing unit and multiple indoor units.

This arrangement provides an individualized comfort control, and simultaneous heating and cooling in different zones.

We propose a 16-ton Variable Refrigerant Flow Recovery system to heat and cool the renovated areas serving the main level with one outdoor concrete pad mounted condensing unit, controls, condensate piping and all required appurtenances for a complete operational system. The VRF system shall be capable of heating and cooling the zones simultaneously. Refrigerant piping shall be type ACR copper and shall be piped to each indoor unit.

The indoor units shall be ceiling mounted or wall type units. A thermostat will be provided for each zone. A VRF heat recovery branch circuit controller sized for the total connectable indoor unit capacity will control the energy recovery process and distribute refrigerant from the outdoor unit to the indoor units.

Ventilation System:

We propose using a sensible and latent type energy recovery ventilation unit and supply duct to provide ventilation to new spaces. An exhaust and outdoor air intake louvers will be provide and duct to the energy recovery unit. Location of each louver shall meet all clearances required by the mechanical code.

Control System

Provide a local DDC master controller to operate and monitor indoor units through the touch screen. The system shall include all power, transformers, thermostats, sensor, wiring and other accessories required for a complete installation. System shall include all hardware to operate as specified. Controls shall be provided by the Variable Refrigerant Flow (VRF) system manufacturer and shall be capable of monitoring and control of the energy recovery system.

The Direct Digital Control (DDC) technology shall be used to provide the functions necessary for control of mechanical systems and terminal devices on this project. The system shall be programmed for occupied/unoccupied cycles for mechanical equipment with an override feature for spaces that would be utilized after – hours. The BAS shall be accessible from any Web browser, with proper authorization.

HVAC Control – Central Building Automation System (BAS) ADD Alternate

The controls serving the entire facility at present are obsolete pneumatic controls which are past their useful service life and in need of replacement. Although not part of the scope of this RFP, it is recommended that the controls be upgraded to an electronic DDC system with BACnet compatibility. New controls intended for this are within the scope of this project will be able to be forward compatible to any BACnet installation eventually undertaken.

Electrical

Existing

The existing facility is fed from the Town Hall building right next door. The MDP serves multiple panels throughout the facility, especially the panels which are located nearby the proposed work area.

The nearby panels consist of several load centers, one of which contains a 100A main circuit breaker & is rated for 120/208V. Another load center is located in the server/IT room & is fed from the panel next to it with a 3-pole 60A circuit breaker, rated for 120/208V. The panel serving it is Panel C & is 200A 120/208V, although panel C appears to have limited circuit breakers. There is a 400A 240V panel located nearby the stage which has limited circuit breakers as well.

The existing space has limited receptacles located throughout, besides for the caged area which appears to have multiple quad receptacles & should have plenty of power in that one corner. The receptacles are a mixture of recessed & surface mounted, using wiremold as raceway to power the device. The receptacles throughout are in decent condition but will need to be removed or replaced since they won't meet code for the space.

Lighting for the existing space consists of pendant mounted 2'x4' fluorescent fixtures which are also mounted to Unistrut to ensure the structural integrity of the fixtures. There are also linear surface mount fluorescent fixtures in the storage areas as well as general areas. All fixtures appear to be in working condition but are old & should be replaced. Lighting controls for the spaces consist of single pole toggle switches which are working, but in fair condition & should be replaced.

Exit signs were found throughout the space in locations they should be & appear to be in working condition, but they are old & should be replaced. Twinhead emergency fixtures were located in minimal locations throughout the space & don't appear to meet the required egress requirements. New fixtures would be recommended & also required by code.

Minimal data or phone jacks were found throughout the area, while they appear to be in fair condition, they are most likely using outdated CAT cabling & an upgrade should be warranted. Several speakers were found in the area surface mounted to the ceiling; these appear to be outdated & in use of an upgrade.

The FACP (Fire Alarm Control Panel) is located in the facilities office, it is an addressable panel by Honeywell. The devices found throughout the space consist of horn/strobes & manual pull stations. Most devices appear to be fairly new & are in great condition. There are several locations where horn/strobes or pull stations should be located by code but are missing. More devices will need to be added to meet current code.

Proposed Option 1

Most panels are fairly full according to the panel schedules & there are many new circuits that will need to be added, due to the use of the space, code & new equipment. Existing panels that have some available space can be used to power the various 120V 20A circuits. There are several pieces of new equipment being added including the elevator & mechanical equipment, some of these devices require a lot of power & are 3-phase, which will take up many of the spare breaker spaces. Therefore, it is assumed a new subpanel will need to be added, powered off the 400A panel to serve the new equipment. This will most likely be a 100A, 3-phase panel.

Due to code for the Multipurpose Room, Kitchenette & Conference Room many new receptacles will need to be added. There will also need to be multiple floor boxes added to the Multipurpose Room & Conference Room to meet code. The Kitchenette will have receptacles added above the counter to meet the spacing & circuiting requirements by code. These receptacles will be grouped together & their branch circuits will have a homerun back to one of the nearby panels. The current LAV doesn't have a call for aid pullstring or corridor light/buzzer which is required by CT code, this will need to be added.

Lighting for the Multipurpose Room will consist of downlights recessed in the clouds, as well as pendants on the Stage. The elevator will have several linear vaportight fixtures located at the top of shaft & in the pit, the lighting levels will be calculated to ensure it meets the minimum code requirements. The Kitchenette, LAV & Corridor spaces will contain downlights, while the Furniture Storage will contain utility strips. The Conference Room will contain a pendant over the table as well as downlights surrounding the table. All fixtures will be LED to ensure the best efficiency & cost savings. Controls for the lighting will consist of dimmer switches for most spaces besides for the LAV & Furniture Storage, those spaces will contain occupancy sensor switches. For the spaces which use dimmer switches, ceiling mounted occupancy sensors will be added to ensure the lights will be off if there are no people in the space.

Existing exit signs will be replaced with new LED one's located in the same place as the removed one's. New exit signs will need to be added to the area where the new hallway was created. Emergency lighting will be covered via battery packs integral to the light fixtures. All existing outdated twinhead emergency fixtures will be removed & disposed of.

Data & voice jacks will be located within the floor boxes which will be located under the furniture for the Multipurpose & Conference Rooms. Data jacks will also be added to any area where a display or smartboard would be added, as well as any space where there is a computer. All data & voice cabling will be brought back to the IT room. Microphone jacks will be added to the Multipurpose & Conference Room via the floor boxes. Speakers will be added to both rooms as well which will be recessed in the ceiling or clouds. These devices will be connected back to a local sound system which will be located nearby or in the space itself, whatever makes the most sense. All category cabling will be CAT 6A or better.

Addressable fire alarm horn/strobes & strobes will be added to spaces in order to meet the current code since most rooms currently don't have a device. Smoke & heat

detectors will be added to the elevator shaft to meet code, as well as smoke detectors located outside of the elevator door openings. Smoke & heat detectors will also be added to the Furniture Storage as well as the Kitchenette. Manual pull stations will need to be installed next to the exit doors. All devices will be addressable & connected back to the FACP.

Proposed Option 2

Most panels are fairly full according to the panel schedules & there are many new circuits that will need to be added, due to the use of the space, code & new equipment. Existing panels that have some available space can be used to power the various 120V 20A circuits. There are several pieces of new equipment being added including the elevator & mechanical equipment, some of these devices require a lot of power & are 3-phase, which will take up many of the spare breaker spaces. Therefore, it is assumed a new subpanel will need to be added, powered off the 400A panel to serve the new equipment. This will most likely be a 100A, 3-phase panel.

Due to code for the Multipurpose Room, Kitchenette & Executive Room many new receptacles will need to be added. There will also need to be multiple floor boxes added to the Multipurpose Room & Executive Room to meet code. The Kitchenette will have receptacles added above the counter to meet the spacing & circuiting requirements by code. These receptacles will be grouped together & their branch circuits will have a homerun back to one of the nearby panels.

Lighting for the Multipurpose Room will consist of downlights recessed in the clouds, as well as pendants filling in the gaps at the edge of the clouds & on the Platform. The elevator will have several linear vaportight fixtures located at the top of shaft & in the pit, the lighting levels will be calculated to ensure it meets the minimum code requirements. The Kitchenette & Corridor spaces will contain downlights, while the Furniture Storage will contain utility strips. The Executive Room will contain a pendant over the table as well as downlights surrounding the table. All fixtures will be LED to ensure the best efficiency & cost savings. Controls for the lighting will consist of dimmer switches for most spaces besides for the Furniture Storage, that space will contain an occupancy sensor switch. For the spaces which use dimmer switches, ceiling mounted occupancy sensors will be added to ensure the lights will be off if there are no people in the space.

Existing exit signs will be replaced with new LED one's located in the same place as the removed one's. Exit signs will need to be added to the new Hallway Connector. Emergency lighting will be covered via battery packs integral to the light fixtures. All existing outdated twinhead emergency fixtures will be removed & disposed of.

Data & voice jacks will be located within the floor boxes which will be located under the furniture for the Multipurpose & Executive Rooms. Data jacks will also be added to any area where a display or smartboard would be added, as well as any space where there is a computer. All data & voice cabling will be brought back to the IT room. Microphone jacks will be added to the Multipurpose & Executive Rooms via the floor boxes. Speakers will be added to both rooms as well which will be recessed in the ceiling or clouds. These devices will be connected back to a local sound system which

will be located nearby or in the space itself, whatever makes the most sense. All category cabling will be CAT 6A or better.

Addressable fire alarm horn/strobes & strobes will be added to spaces in order to meet the current code since most rooms currently don't have a device. Smoke & heat detectors will be added to the elevator shaft to meet code, as well as smoke detectors located outside of the elevator door openings. Smoke & heat detectors will also be added to the Furniture Storage as well as the Kitchenette. Manual pull stations will need to be installed next to the exit doors. All devices will be addressable & connected back to the FACP.

Alternate 1

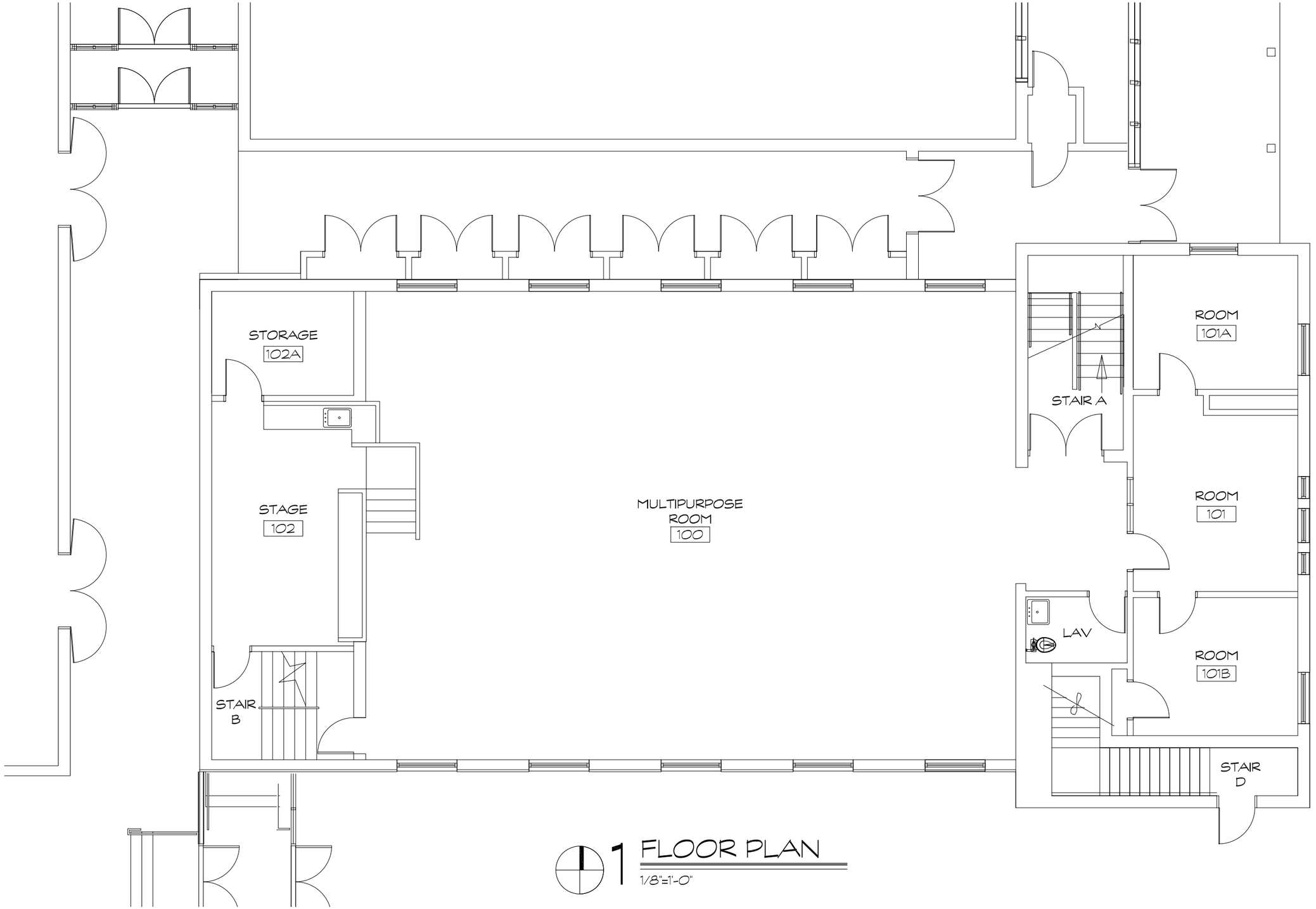
Exit sign as well as fire alarm manual pull station & horn/strobe will need to be relocated so they are in line with the new location of the vestibule doors. The lighting will also need to be relocated so it is centered in the space, any light fixture that falls on top of the new location for the doors will need to be relocated as well.

SECTION II – FLOOR PLANS

Existing

Option 1

Option 2



1 FLOOR PLAN

1/8"=1'-0"

EXISTING MAIN LEVEL

Glastonbury Town Hall
Williams Memorial Study
2155 Main Street
Glastonbury, CT 06033

SILVER/PETRUCELLI + ASSOCIATES
Architects / Engineers / Interior Designers
3190 Whitney Avenue, Hamden, CT 06518-2340
One Post Hill Place, New London, CT 06320
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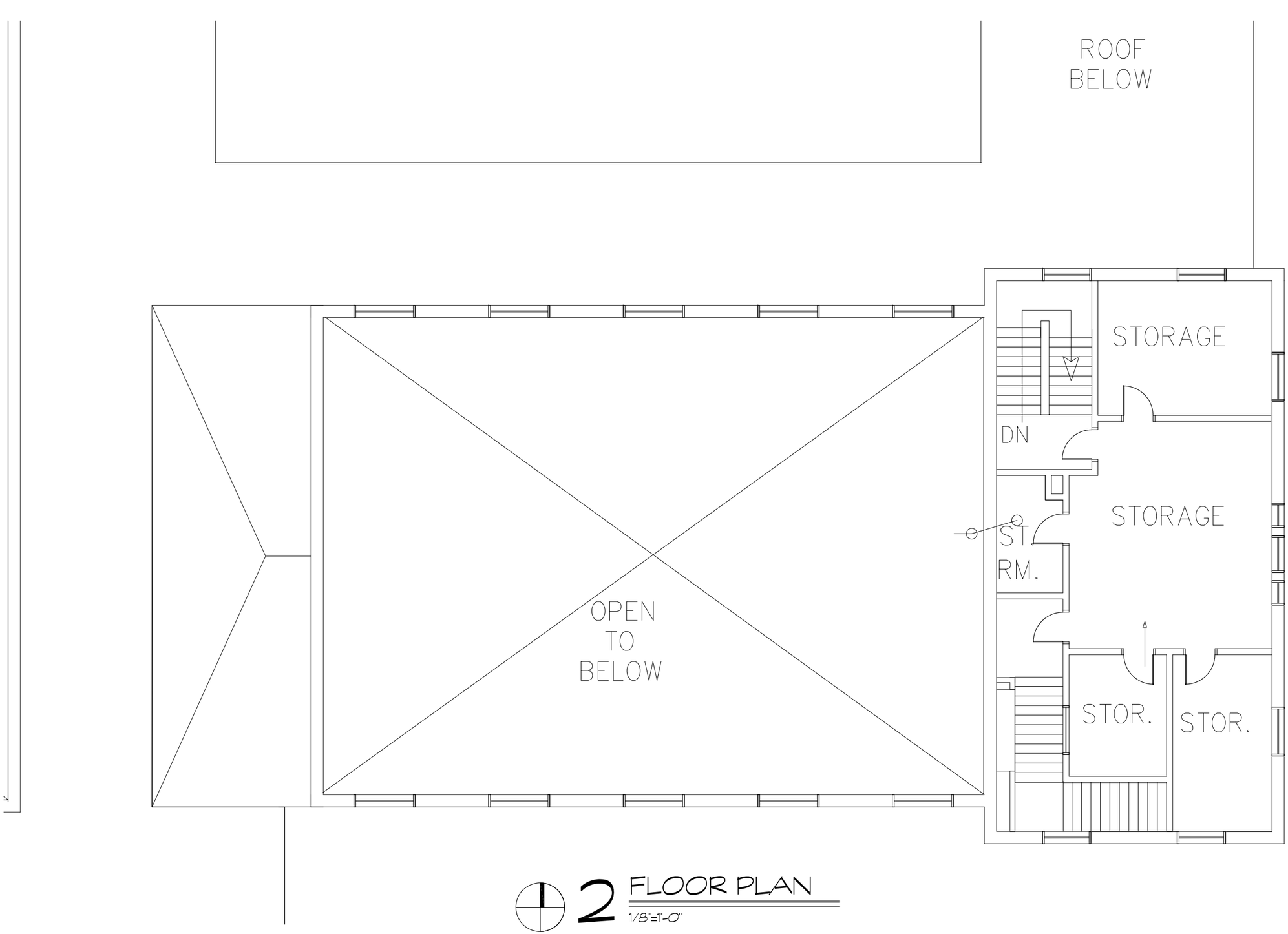

2 FLOOR PLAN

1/8"=1'-0"

Glastonbury Town Hall
Williams Memorial Study
2155 Main Street
Glastonbury, CT 06033

EXISTING UPPER LEVEL

SILVER/PETRUCELLI + ASSOCIATES
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3190 Whitney Avenue, Hamden, CT 06518-2340
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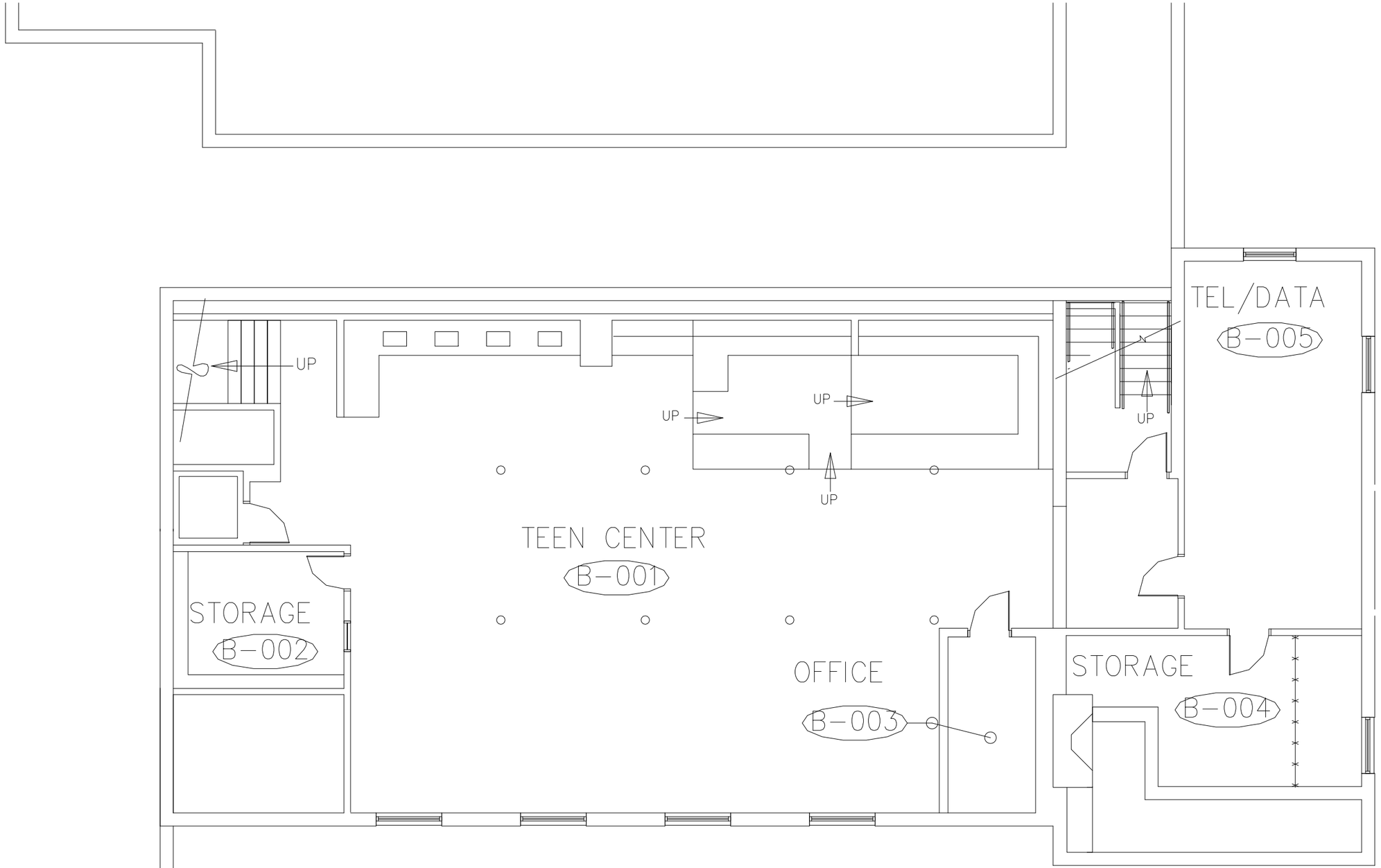

3 FLOOR PLAN

1/8"=1'-0"

Glastonbury Town Hall
Williams Memorial Study
2155 Main Street
Glastonbury, CT 06033

EXISTING LOWER LEVEL: TEEN CENTER

SILVER/PETRUCELLI + ASSOCIATES
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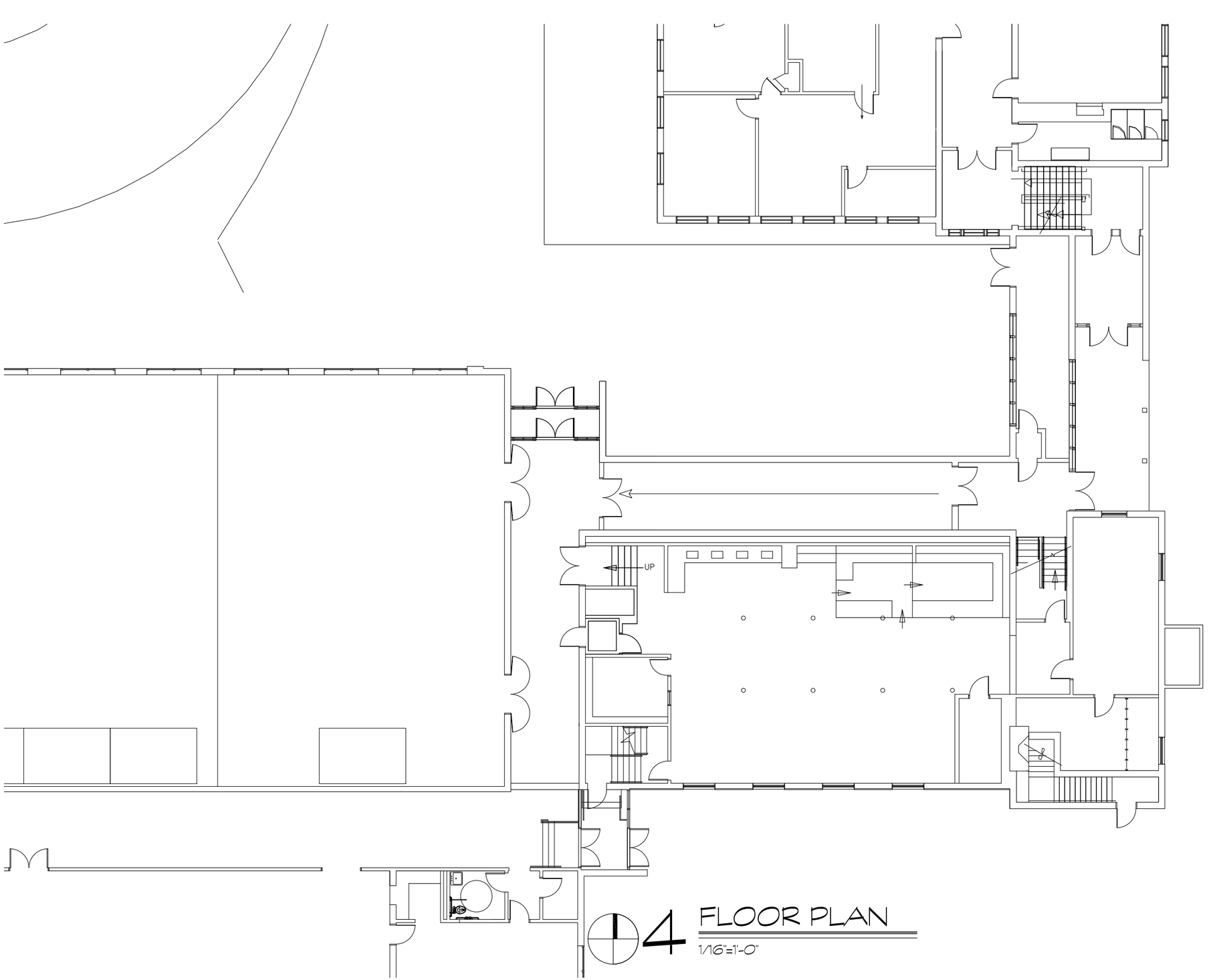

4 FLOOR PLAN

1/16"=1'-0"

Glastonbury Town Hall
Williams Memorial Study

2155 Main Street
Glastonbury, CT 06033

EXISTING MAIN LEVEL

SILVER/PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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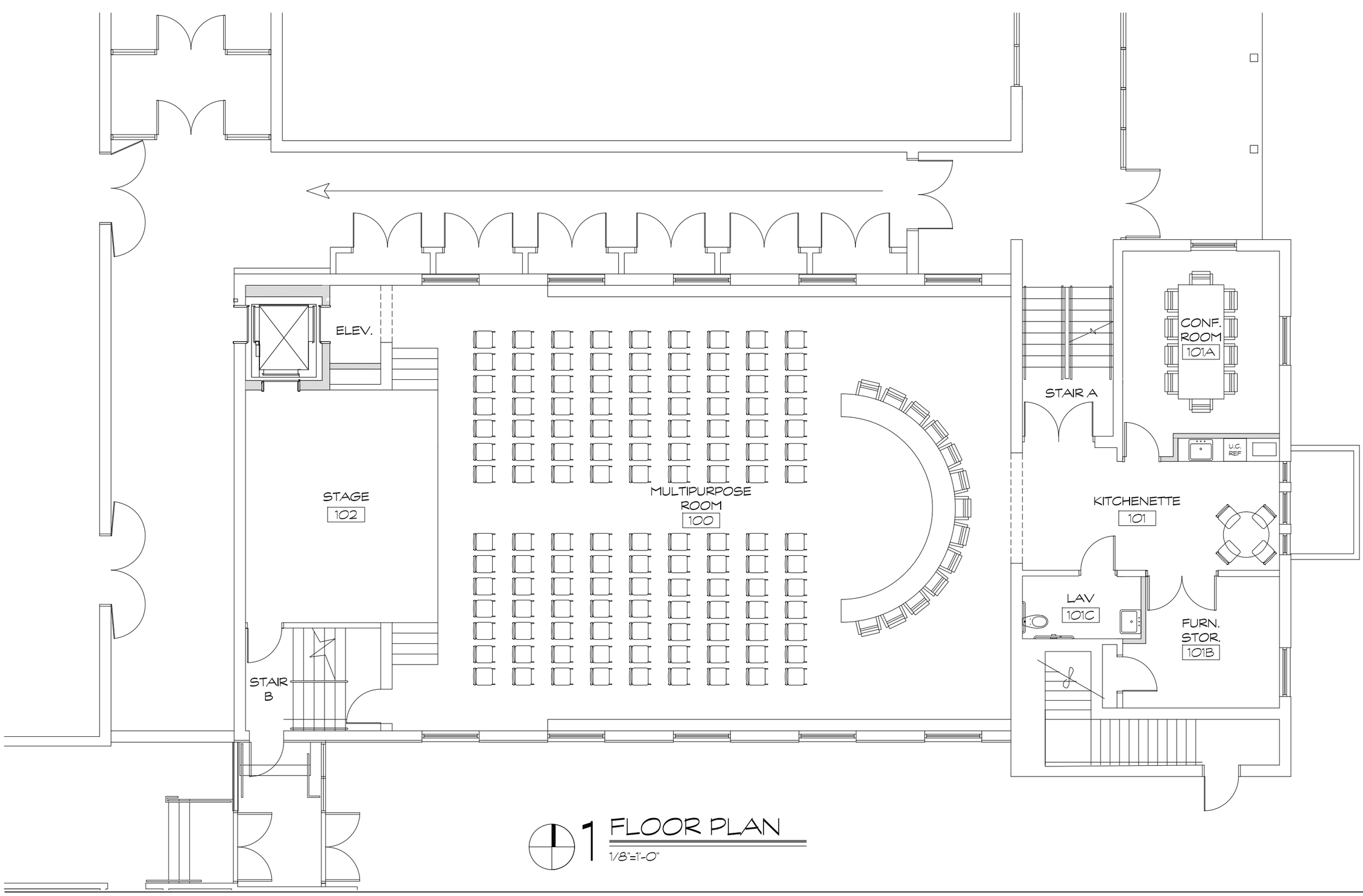

1 FLOOR PLAN

1/8"=1'-0"

Glastonbury Town Hall
Williams Memorial Study

2155 Main Street
Glastonbury, CT 06033

OPTION 1: MAIN LEVEL

SILVER/PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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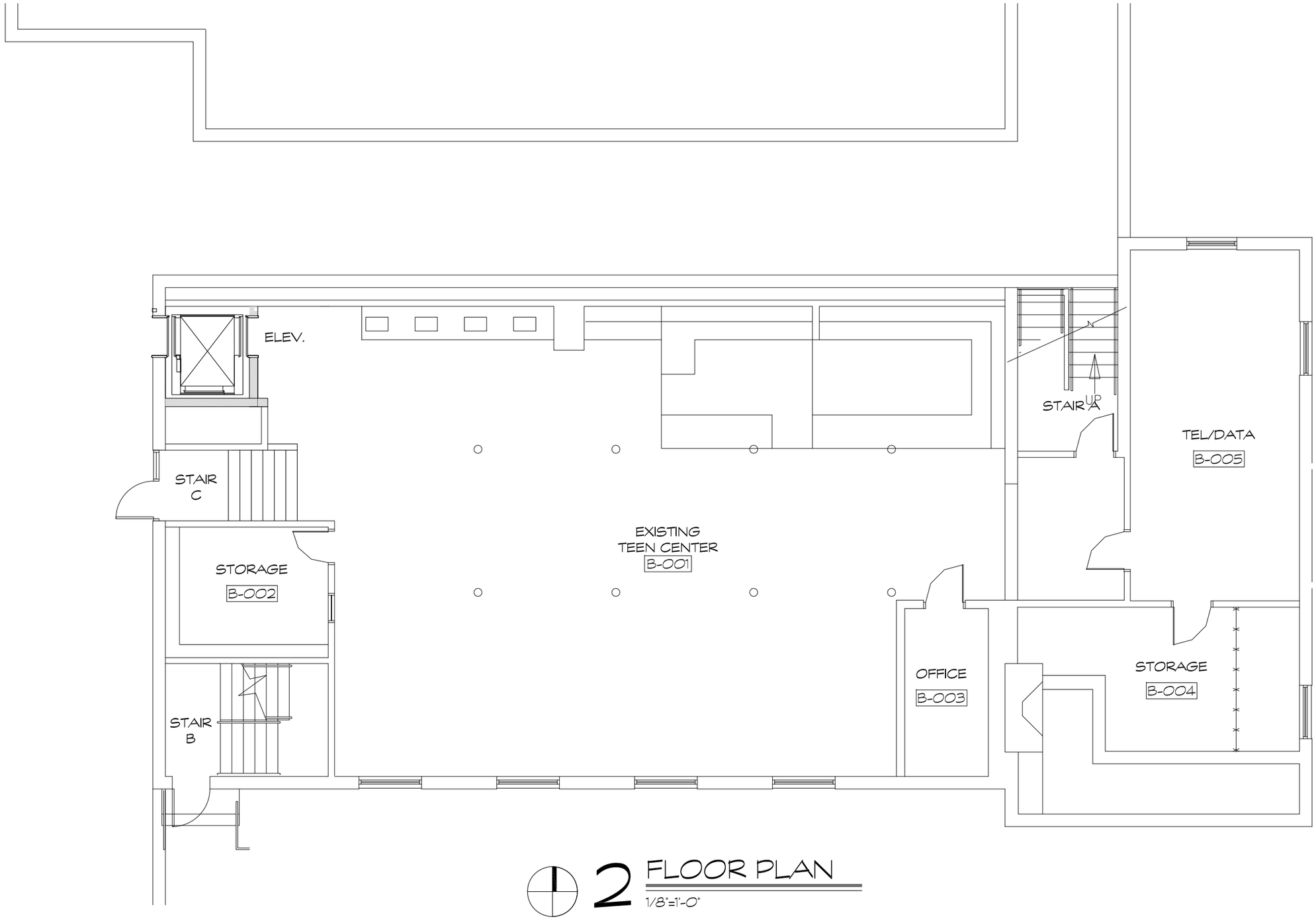

2 FLOOR PLAN

1/8"=1'-0"

Glastonbury Town Hall
Williams Memorial Study

2155 Main Street
Glastonbury, CT 06033

OPTION 1: LOWER LEVEL TEEN CENTER

SILVER/PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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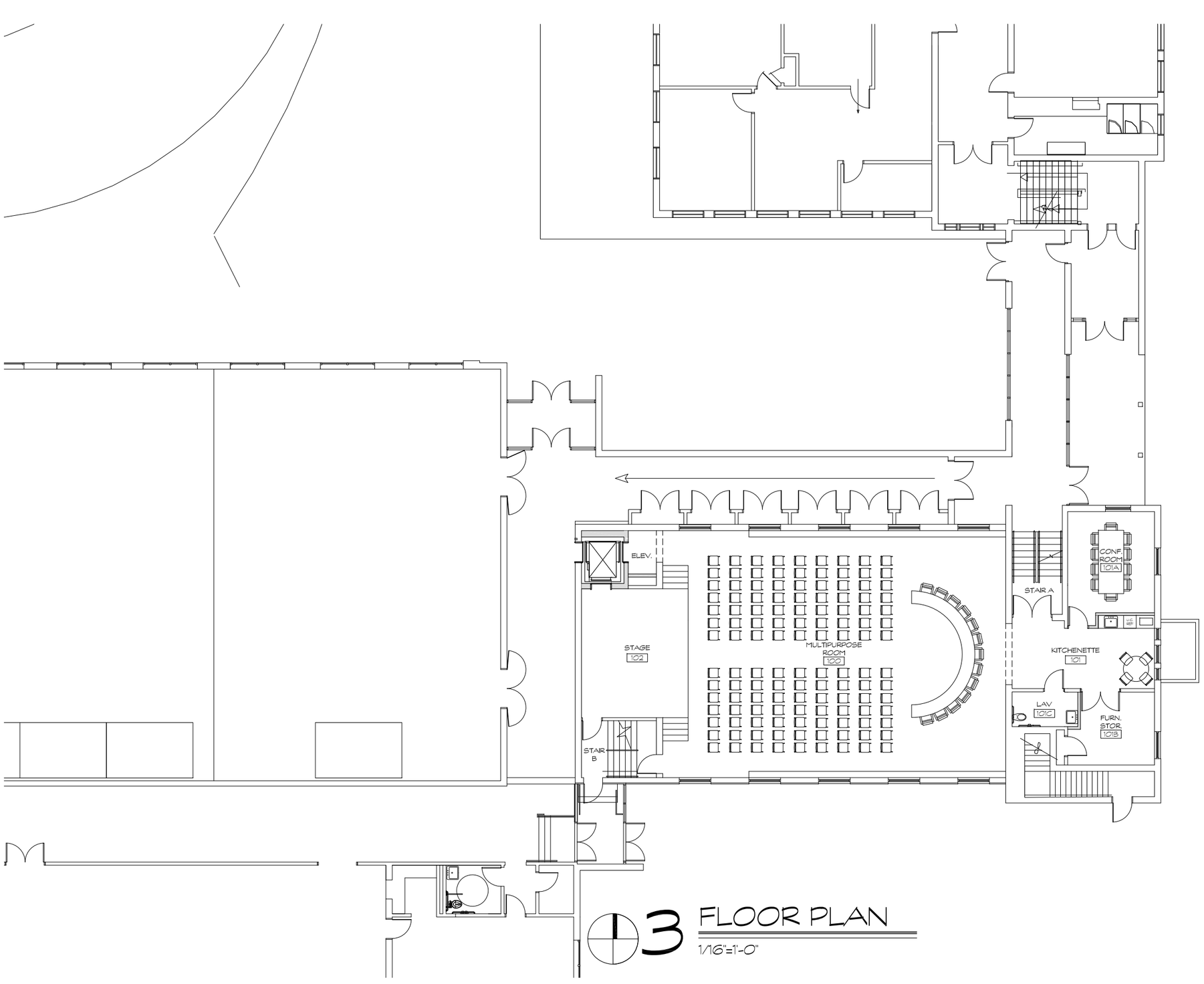

3 FLOOR PLAN

1/16"=1'-0"

Glastonbury Town Hall
Williams Memorial Study

2155 Main Street
Glastonbury, CT 06033

OPTION 1: OVERALL MAIN LEVEL

SILVER/PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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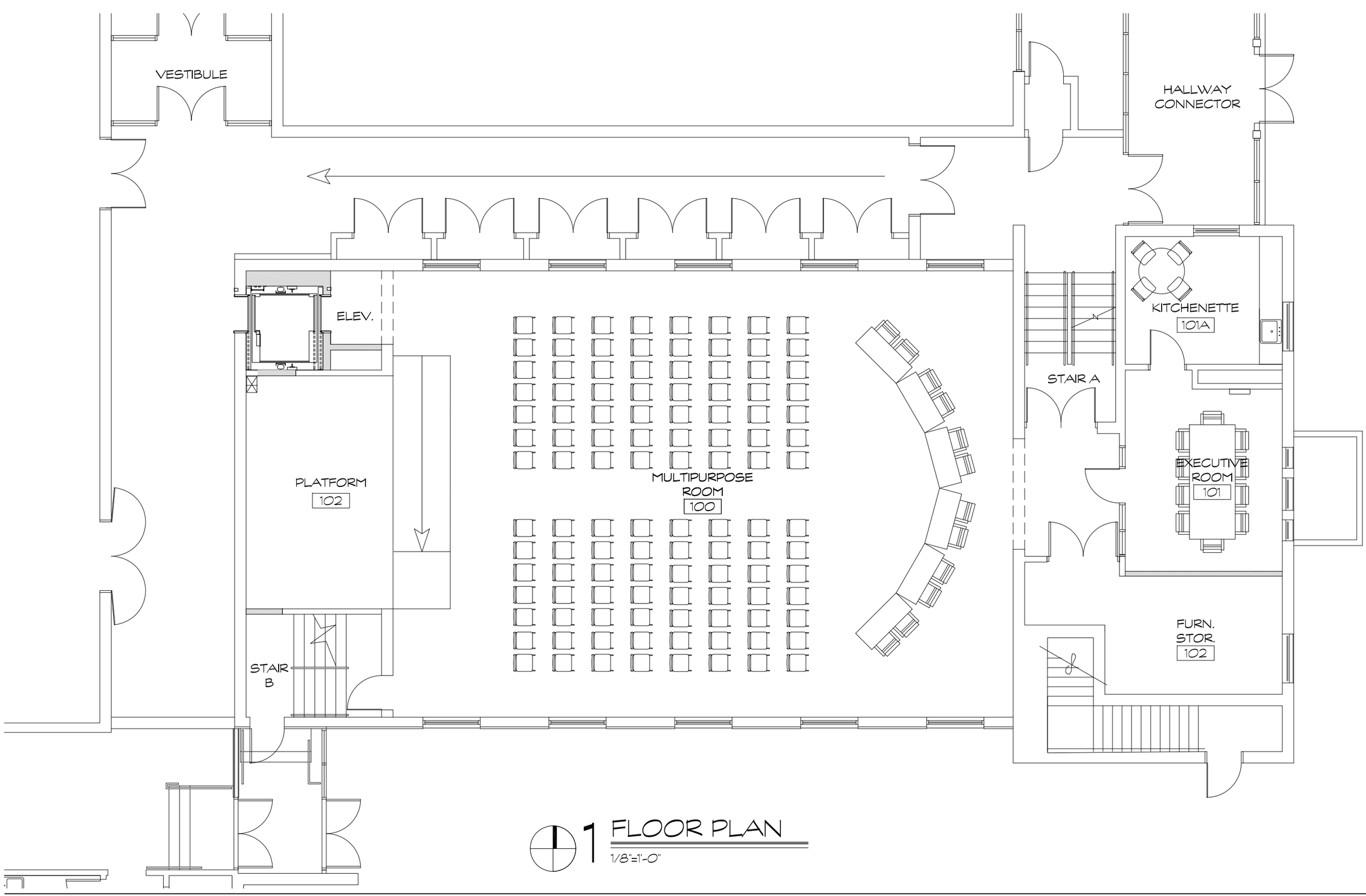
silverpetrucelli.com



1 FLOOR PLAN

1/8"=1'-0"

Glastonbury Town Hall
Williams Memorial Study

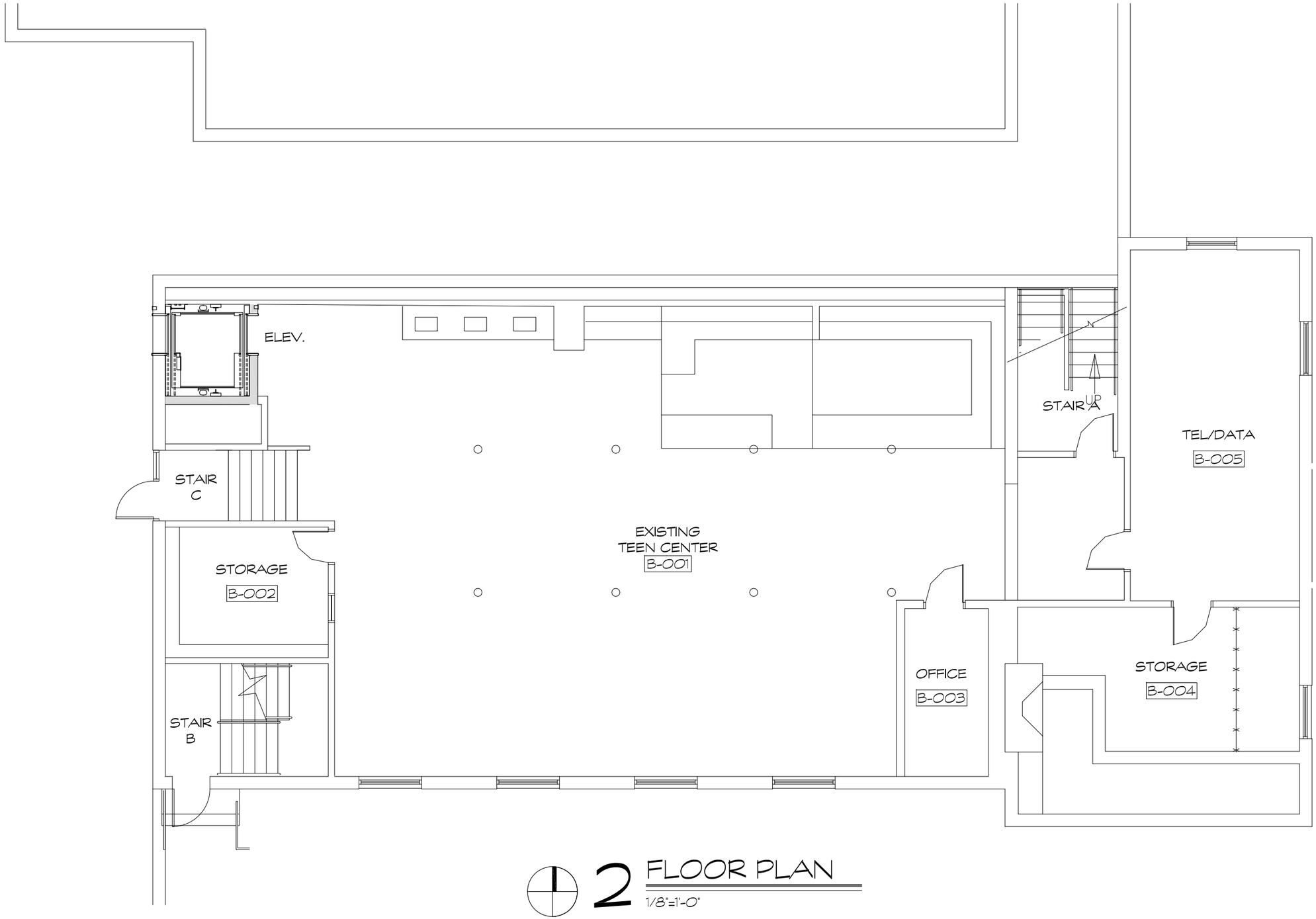
2155 Main Street
Glastonbury, CT 06033

OPTION 2: MAIN LEVEL

SILVER/PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

3190 Whitney Avenue, Hamden, CT 06518-2340
One Post Hill Place, New London, CT 06320
Tel. 203 230 9007 Fax. 203 230 8247
silverpetrucelli.com



2 FLOOR PLAN

1/8"=1'-0"

Glastonbury Town Hall
Williams Memorial Study

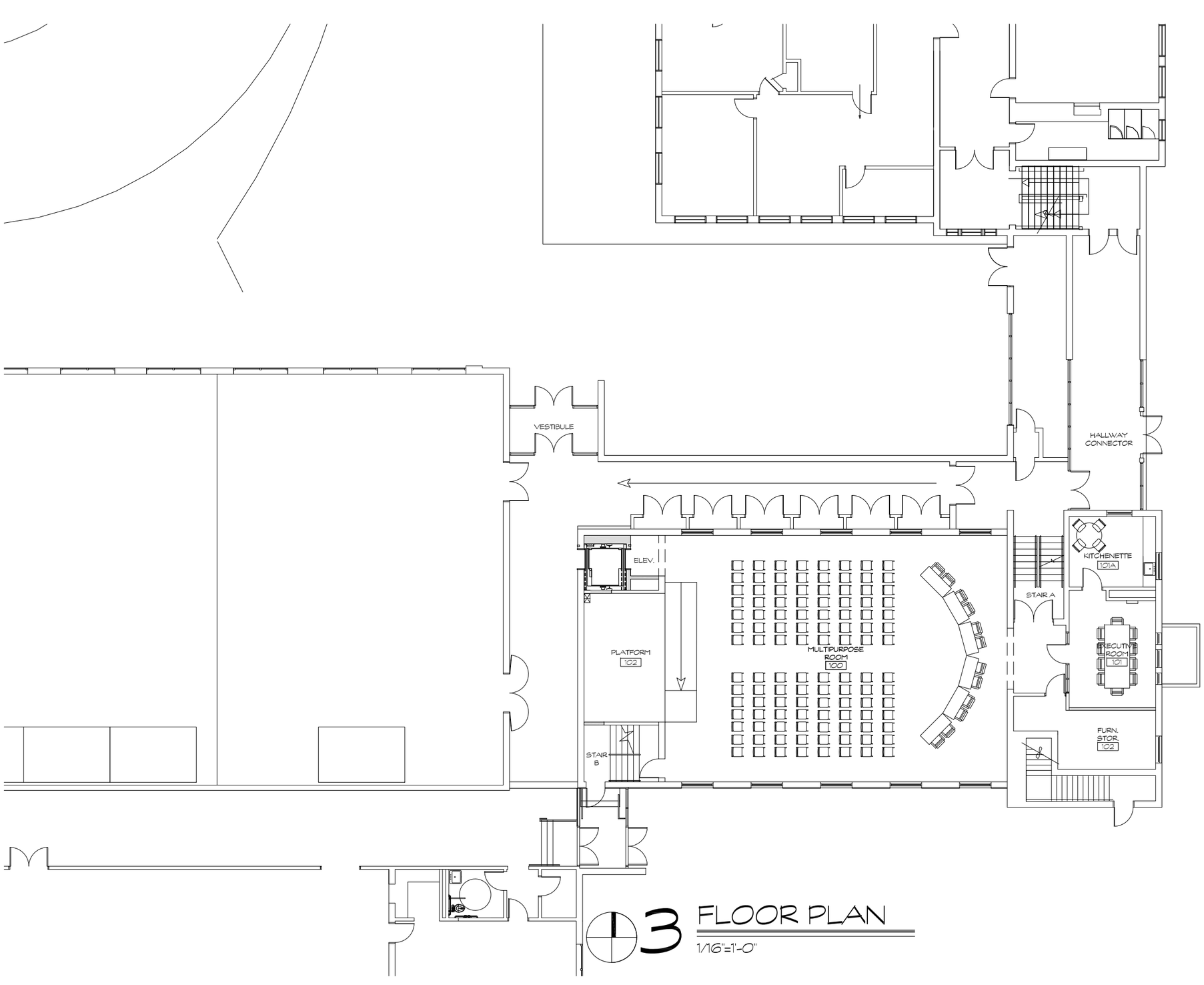
2155 Main Street
Glastonbury, CT 06033

OPTION 2: LOWER LEVEL TEEN CENTER

SILVER/PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

3190 Whitney Avenue, Hamden, CT 06518-2340
One Post Hill Place, New London, CT 06320
Tel. 203 230 9007 Fax. 203 230 8247
silverpetrucelli.com



1 3 FLOOR PLAN

1/16"=1'-0"

Glastonbury Town Hall
Williams Memorial Study

2155 Main Street
Glastonbury, CT 06033

OPTION 2: OVERALL MAIN LEVEL

SILVER/PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

3190 Whitney Avenue, Hamden, CT 06518-2340
One Post Hill Place, New London, CT 06320
Tel. 203 230 9007 Fax. 203 230 8247
silverpetrucelli.com

SECTION III - ESTIMATES

Option 1 Preliminary Design Estimate

Task	Unit	Takeoff Quantity	Total Cost / Unit	Total Project Development Cost
Division 1 - General Requirements				
01 21 16.50 Contingencies (design)	Total Cost	1	10.00%	$136,038.20
01 00.00 General Conditions	Project	1	15.00%	$204,057.30
01 74 13.20 Cleaning Up (final)	Job	1	0.30%	$4,081.15
01 76 13.20 Temporary Protection	SF	3,200	$1.30	$4,160.00
Subtotal				**$348,337**
Division 2 - Existing Conditions				
Selective Demoltion	SF	3,200	$30.00	$96,000
Dumpsters	EA	4	$1,000	$4,000
02 82 13.43 Bulk Asbestos removal (allowance)	LS		$50,000	$50,000
Subtotal				**$150,000**
Division 3 - Concrete				
03 30 53.40 cast in place concrete - Foundations & Footings	CY	15	$900.00	$13,500
03 30 53.40 cast in place concrete - Slabs	SF	150	$30.00	$4,500
Subtotal				**$18,000**
Division 4 - Masonry				
04 05 16.30 Masonry & CMU	SF	1,100	$50	$55,000
Subtotal				**$55,000**
Division 5 - Metals				
05 12 00 Structural Steel ~14lbs/s.f.	LS	1	$2,000	$2,000
05 73 23.50 Metal Railings (stairs)	LF	95	$200.00	$19,000
05 40 00 Metal Stud (partitions w/ gyp & batt)	SF	250	$20.00	$5,000
Steel lintels	LF	6	$35.00	$210
Subtotal				**$26,210**
Division 6 - Woods, Plastics & Composites				
06 20 23 Interior Finish Carpentry (Base Cabinetry)	LF	10	$500.00	$5,000
06 20 23 Interior Finish Carpentry (Upper Cabinetry)	LF	10	$400.00	$4,000
Shelving allowance (modify/fix existing perimeter)	LS	1	$3,000.00	$3,000
Window Sills	LF	86	$60.00	$5,160
Framing: Stage and stairs	LS	1	$10,000.00	$10,000
Subtotal				**$27,160**

Option 1 Preliminary Design Estimate

Division 7 - Thermal & Moisture Protection				
07 92 13.20 Caulking & Sealants	LS	1	$5,000.00	$5,000
Subtotal				**$5,000**
Division 8 - Openings				
08 43 13.10 Aluminum Framed Entrance Door (single)	EA	3	$1,000.00	$3,000
08 43 13.10 Aluminum Framed Entrance Door (double)	EA	3	$2,000.00	$6,000
08 71.20.15 Door Hardware	EA	6	$1,200.00	$7,200
08 41 26.10 Window Walls Aluminum	SF	216	$125.00	$27,000
New windows at Multipurpose room	EA	10	$8,000.00	$80,000
Subtotal				**$123,200**
Division 9 - Finishes				
09 91 23.74 Interior Painting (at existing areas)	SF	6,000	$2.50	$15,000
09 91 23.39 Interior Painting (painted door trim)	EA	4	$200.00	$800
09 51 23.10 Suspended Ceilings (new and existing)	SF	1,055	$6.00	$6,330
Ceiling Clouds	SF	1,200	$12.00	$14,400
09 30 13.10 Ceramic Tiling (toilet room)	SF	60	$10.00	$600
09 30 13.10 Ceramic Tiling (toilet room wall tile)	SF	130	$8.00	$1,040
09 65 13 Rubber base	LF	398	$4.00	$1,592
VCT flooring	SF	506	$5.00	$2,530
Carpet tiles	SY	263	$45.00	$11,835
Wood floor (stage)	SF	350	$18.00	$6,300
Subtotal				**$60,427**
Division 10 - Specialties				
10 28 13.13 Washroom Accessories (mirror)	EA	1	$250.00	$250
10 28 13.13 toilet Accessories (36" grab bar)	EA	1	$75.00	$75
10 28 13.13 toilet Accessories (42" grab bar)	EA	1	$80.00	$80
10 28 13.13 toilet Accessories (18" v.grab bar)	EA	1	$65.00	$65
10 28 13.13 toilet Accessories (toilet paper)	EA	1	$55.00	$55
10 28 13.13 toilet Accessories (paper towel disp.)	EA	1	$375.00	$375
10 28 13.13 toilet Accessories (soap disp.)	EA	1	$90.00	$90
10 28 13.13 toilet Accessories (robe hook)	EA	1	$45.00	$45
10.44 16.13 Portable Fire Extinguisher	EA	1	$125.00	$125
Subtotal				**$1,160**
Division 12 - Furnishings				
12 24 13.10 Roller Window Shades	EA	10	$500.00	$5,000
09 84 13 - Fixed Sound-Absorptive Panels	LS	1	$10,000.00	$10,000
Furniture allowance	LS	1	$50,000.00	$50,000
Subtotal				**$65,000**

Option 1 Preliminary Design Estimate

Division 14 - Conveying Equipment				
4 stop 3 door Elevator	LS	1	$275,000.00	$275,000
Subtotal				**$275,000**
Division 21 - Fire Suppression				
Demolition Costs	LS	1	$12,500.00	$12,500
Full sprinkler system at New	LS	1	$114,500.00	$114,500
Startup/shutdown, general conditions	LS	1	$5,000.00	$5,000
Subtotal				**$132,000**
Division 22 - Plumbing				
Demolition Costs	LS	1	$3,500.00	$3,500
Startup/shutdown, general conditions	LS	1	$3,600.00	$3,600
Fixtures, associated piping	EA	3	$5,000.00	$15,000
New supply and DWV mains, and a 40 gallon water heater with accessories	LS	1	$15,000.00	$15,000
Subtotal				**$37,100**
Division 23 - Heating, Ventilating & AC				
New Controls	LS	1	$70,000.00	$70,000
New Energy Recovery Ventilation	LS	1	$18,000.00	$18,000
New VRF Hyper Heat System	LS	1	$80,000	$80,000
Mechanical Demo	LS	1	$10,000	$10,000
New Ductwork, Grills & Louvers	LS	1	20,000	$20,000
Subtotal				**$198,000**
Division 26 - Electrical				
26 09 23 Lighting Control Devices	LS	1	$4,850.00	$4,850
26 24 16 Panelboards	LS	1	$4,525.00	$4,525
26 27 26 Wiring Devices	LS	1	$53,250.00	$53,250
26 28 16 Enclosed Switches and Circuit Breakers	LS	1	$14,500.00	$14,500
26 51 19 Interior LED Lighting	LS	1	$73,000.00	$73,000
26 52 13 Emergency and Exit Lighting	LS	1	$5,000.00	$5,000
Subtotal				**$155,125**
Division 27 - Communications				
27 15 13 Communications Copper Horizontal Cabling	LS	1	$4,750.00	$4,750
27 51 16 Public Address Systems	LS	1	$13,750.00	$13,750
Subtotal				**$18,500**
Division 28 - Electronic Safety & Security				
28 31 11 Digital, Addressable Fire Alarm System	LS	1	$13,500.00	$13,500
Subtotal				**$13,500**

Option 1 Preliminary Design Estimate

Construction Total				**$1,708,719**
Escalation @ 5%				**$85,436**
Escalated Construction Total (date)				**$1,794,155**
Owners Contingency @ 10%				**$179,415**
Subtotal				**$1,973,570**
Anticipated Material & Testing Fees				**$25,000**
Anticipated Design Fees				**$138,150**
Total Project Cost				**$2,136,720**
Cost Per S.F.				**$ 668**
Alternate #1 - Vestibule				
Selective Demoltion	SF	100	$25.00	$2,500
08 43 13.10 Aluminum Framed Entrance Door (doub	EA	2	$2,000.00	$4,000
08 71.20.15 Door Hardware	EA	2	$1,200.00	$2,400
08 41 26.10 Window Walls Aluminum	SF	140	$125.00	$17,500
09 91 23.74 Interior Painting	SF	112	$2.50	$280
09 51 23.10 Suspended Ceilings	SF	100	$6.00	$600
09 65 13 Rubber Base	LF	14	$4.00	$56
VCT flooring	SF	100	$5.00	$500
26 51 19 Interior LED Lighting	LS	1	$1,000.00	$1,000
26 52 13 Emergency and Exit Lighting	LS	1	$250.00	$250
28 31 11 Digital, Addressable Fire Alarm System	LS	1	$500.00	$500
Subtotal				**$29,586**
01 21 16.50 Contingencies (design)	Total Cost	1	10.00%	$2,958.60
01 00.00 General Conditions	Project	1	15.00%	$4,437.90
Construction Total				**$36,983**
Escalation @ 5%				**$1,849**
Escalated Construction Total				**$38,832**
Owners Contingency @ 10%				**$3,883**
Subtotal				**$42,715**
Anticipated Design Fees				**$2,990**
Vestibule Total Project Cost				**$45,705**
HVAC Controls				
HVAC Control-Central Building Automation System	SF		$10.00	$0

Option 2 Preliminary Design Estimate

Task	Unit	Takeoff Quantity	Total Cost / Unit	Total Project Development Cost
Division 1 - General Requirements				
01 21 16.50 Contingencies (design)	Total Cost	1	10.00%	$131,306.50
01 00.00 General Conditions	Project	1	15.00%	$196,959.75
01 74 13.20 Cleaning Up (final)	Job	1	0.30%	$3,939.20
01 76 13.20 Temporary Protection	SF	3,200	$1.30	$4,160.00
Subtotal				**$336,365**
Division 2 - Existing Conditions				
Selective Demoltion	SF	3,200	$35.00	$112,000
Dumpsters	EA	4	$1,000	$4,000
02 82 13.43 Bulk Asbestos removal (allowance)	LS		$50,000	$50,000
Subtotal				**$166,000**
Division 3 - Concrete				
03 30 53.40 cast in place concrete - Foundations & Footings	CY	15	$900.00	$13,500
03 30 53.40 cast in place concrete - Slabs	SF	150	$30.00	$4,500
Subtotal				**$18,000**
Division 4 - Masonry				
04 05 16.30 Masonry & CMU	SF	1,100	$50	$55,000
Subtotal				**$55,000**
Division 5 - Metals				
05 12 00 Structural Steel ~14lbs/s.f.	LS	1	$2,000	$2,000
05 73 23.50 Metal Railings (stairs)	LF	100	$200.00	$20,000
05 40 00 Metal Stud (partitions w/ gyp & batt)	SF	150	$20.00	$3,000
Steel lintels	LF	6	$25.00	$150
Subtotal				**$25,150**
Division 6 - Woods, Plastics & Composites				
06 20 23 Interior Finish Carpentry (Base Cabinetry)	LF	12	$500.00	$6,000
06 20 23 Interior Finish Carpentry (Upper Cabinetry)	LF	12	$400.00	$4,800
Shelving allowance (modify/fix existing perimeter)	LS	1	$3,000.00	$3,000
Window Sills	LF	86	$60.00	$5,160
Framing: Stage and stairs	LS	1	$20,000.00	$20,000
Subtotal				**$38,960**

Option 2 Preliminary Design Estimate

Division 7 - Thermal & Moisture Protection				
07 92 13.20 Caulking & Sealants	LS	1	$5,000.00	$5,000
Roofing & insulation at canopy	SF	340	$35.00	$11,900
Subtotal				**$16,900**
Division 8 - Openings				
08 43 13.10 Aluminum Framed Entrance Door (single)	EA	2	$1,000.00	$2,000
08 43 13.10 Aluminum Framed Entrance Door (double)	EA	2	$2,000.00	$4,000
08 71.20.15 Door Hardware	EA	4	$1,200.00	$4,800
08 41 26.10 Window Walls Aluminum	SF	128	$125.00	$16,000
New windows at Multipurpose room	EA	10	$8,000.00	$80,000
Subtotal				**$106,800**
Division 9 - Finishes				
09 91 23.74 Interior Painting (at existing areas)	SF	6,000	$2.50	$15,000
09 91 23.39 Interior Painting (painted door trim)	EA	5	$200.00	$1,000
09 51 23.10 Suspended Ceilings (new and existing)	SF	1,520	$6.00	$9,120
Ceiling Clouds	SF	1,200	$12.00	$14,400
09 30 13.10 Ceramic Tiling (toilet room)	SF	60	$10.00	$600
09 30 13.10 Ceramic Tiling (toilet room wall tile)	SF	130	$8.00	$1,040
09 65 13 Rubber base	LF	445	$4.00	$1,780
VCT flooring	SF	706	$5.00	$3,530
Carpet tiles	SY	263	$45.00	$11,835
Wood floor (stage)	SF	350	$18.00	$6,300
Subtotal				**$64,605**
Division 10 - Specialties				
10.44 16.13 Portable Fire Extinguisher	EA	1	$125.00	$125
Subtotal				**$125**
Division 12 - Furnishings				
12 24 13.10 Roller Window Shades	EA	10	$500.00	$5,000
09 84 13 - Fixed Sound-Absorptive Panels	LS	1	$10,000.00	$10,000
Furniture allowance	LS	1	50,000.00	$50,000
Subtotal				**$65,000**
Division 14 - Conveying Equipment				
3 stop, 2 door Elevator	LS	1	$225,000.00	$225,000
Subtotal				**$225,000**
Division 21 - Fire Suppression				
Demolition Costs	LS	1	$12,500.00	$12,500
Full sprinkler system at New	LS	1	$114,500.00	$114,500
Startup/shutdown, general conditions	LS	1	$5,000.00	$5,000
Subtotal				**$132,000**

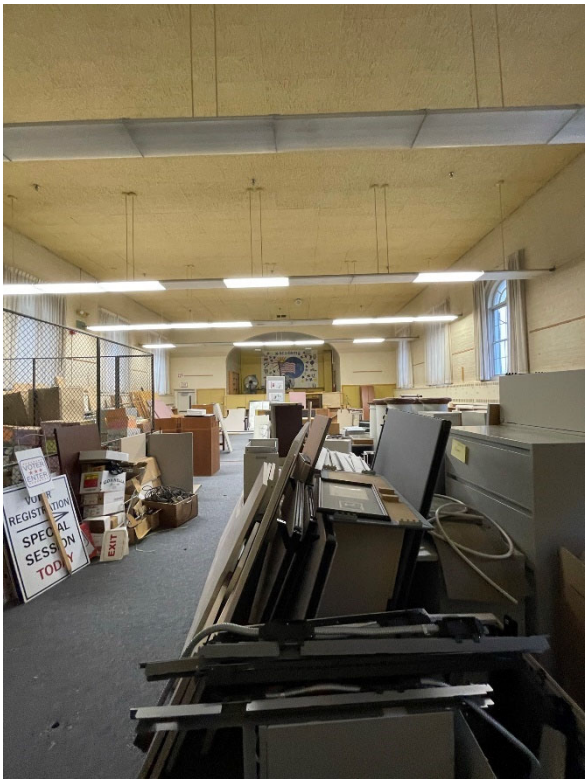
Option 2 Preliminary Design Estimate

Division 22 - Plumbing				
Demolition Costs	LS	1	$3,500.00	$3,500
Startup/shutdown, general conditions	LS	1	$3,600.00	$3,600
Fixtures, associated piping	EA	1	$5,000.00	$5,000
heater with accessories	LS	1	$15,000.00	$15,000
Subtotal				**$27,100**
Division 23 - Heating, Ventilating & AC				
New Controls	LS	1	$70,000.00	$70,000
New Energy Recovery Ventilation	LS	1	$18,000.00	$18,000
New VRF Hyper Heat System	LS	1	$80,000.00	$80,000
New Ductwork, Grills Louvers & Ceiling Fan	LS	1	$20,000.00	$20,000
Mechanical Demo	LS	1	$10,000.00	$10,000
Subtotal				**$198,000**
Division 26 - Electrical				
26 09 23 Lighting Control Devices	LS		$4,850.00	$4,850
26 24 16 Panelboards	LS		$4,525.00	$4,525
26 27 26 Wiring Devices	LS		$53,250.00	$53,250
26 28 16 Enclosed Switches and Circuit Breakers	LS		$14,500.00	$14,500
26 51 19 Interior LED Lighting	LS		$65,000.00	$65,000
26 52 13 Emergency and Exit Lighting	LS		$3,300.00	$3,300
Subtotal				**$145,425**
Division 27 - Communications				
27 15 13 Communications Copper Horizontal Cabli	LS		$4,750.00	$4,750
27 51 16 Public Address Systems	LS		$13,750.00	$13,750
Subtotal				**$18,500**
Division 28 - Electronic Safety & Security				
28 31 11 Digital, Addressable Fire Alarm System	LS		$10,500.00	$10,500
Subtotal				**$10,500**

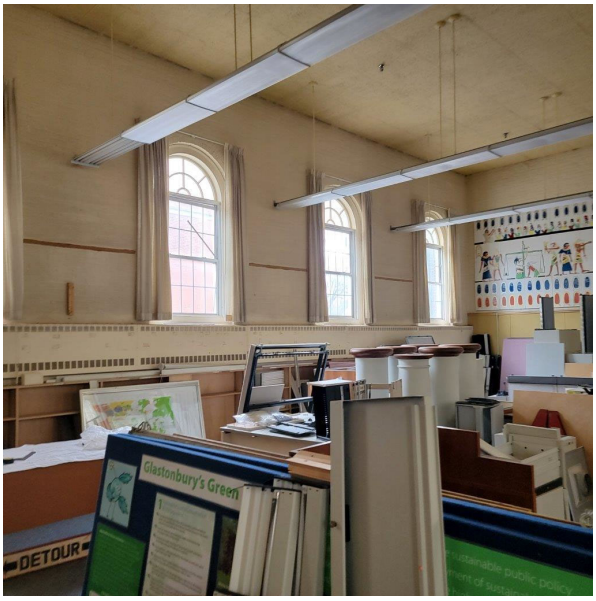
Option 2 Preliminary Design Estimate

Construction Total				**$1,649,430**
Escalation @ 5%				**$82,472**
Escalated Construction Total				**$1,731,902**
Owners Contingency @ 10%				**$173,190**
Subtotal				**$1,905,092**
Anticipated Material & Testing Fees				**$25,000**
Anticipated Design Fees				**$133,356**
Total Project Cost				**$2,063,449**
Cost Per S.F.				**645**
Alternate #1 - Vestibule				
Selective Demoltion	SF	100	$25.00	$2,500
08 43 13.10 Aluminum Framed Entrance Door (doub	EA	2	$2,000.00	$4,000
08 71.20.15 Door Hardware	EA	2	$1,200.00	$2,400
08 41 26.10 Window Walls Aluminum	SF	140	$125.00	$17,500
09 91 23.74 Interior Painting	SF	112	$2.50	$280
09 51 23.10 Suspended Ceilings	SF	100	$6.00	$600
09 65 13 Rubber Base	LF	14	$4.00	$56
VCT flooring	SF	100	$5.00	$500
26 51 19 Interior LED Lighting	LS	1	$1,000.00	$1,000
26 52 13 Emergency and Exit Lighting	LS	1	$250.00	$250
28 31 11 Digital, Addressable Fire Alarm System	LS	1	$500.00	$500
Subtotal				**$29,586**
01 21 16.50 Contingencies (design)	Total Cost	1	10.00%	$2,958.60
01 00.00 General Conditions	Project	1	15.00%	$4,437.90
Construction Total				**$36,983**
Escalation @ 5%				**$1,849**
Escalated Construction Total				**$38,832**
Owners Contingency @ 10%				**$3,883**
Subtotal				**$42,715**
Anticipated Design Fees				**$2,990**
Vestibule Total Project Cost				**$45,705**
HVAC Controls				
HVAC Control-Central Building Automation System	SF		$10.00	$0

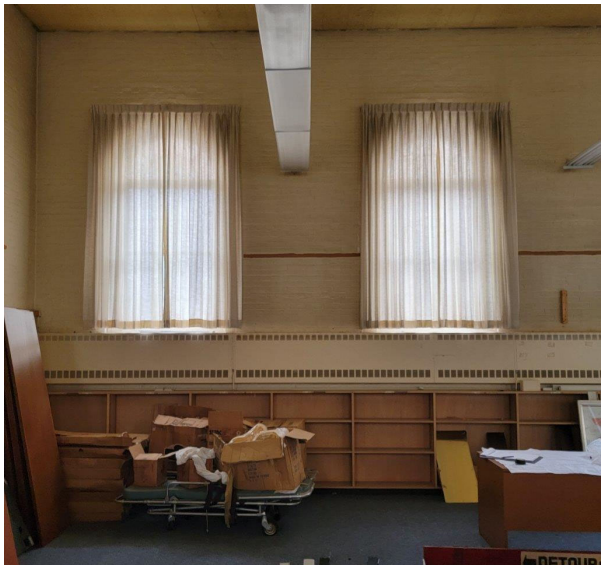
SECTION IV - PHOTOGRAPHS




EXIT


Glastonbury's Green
DETOUR


Academy



SECTION VI - CONCLUSION

The Williams Memorial Building has seen multiple uses over the last century. Located in the heart of the Academy Complex/Town Hall this location is ideal to be utilized as a Council Chamber and multipurpose space for community events and more. It currently sits underutilized and obsolete.

While the open space is dated and disused, it has potential to be renovated into a multiuse open space for the community and Council. This historic structure could be renovated with improvements to code compliance, accessibility, usage/function, finishes, and building systems/infrastructure. The inclusion of an elevator, renovations to the space and incorporation of new building systems will allow this space to function well for the Town of Glastonbury.

Preliminary Proposed Schedule

The following is a rough outline of what could be anticipated for the project schedule moving forward.

TASK	**BEGIN**	**END**
Award to Architect	March 14, 2022	n/a
Design Phase	April 01, 2022	June 24, 2022
Town Review/Bid Prep Period	June 24, 2022	July 8, 2022
Bid Period	July 11, 2022	August 15, 2021
Contract Award (GC)	August 16, 2022	September 13, 2022
Construction Start	September 13, 2022	n/a
Substantial Completion/Occupancy	March 13, 2022	n/a