



November 26, 2018

Brad Schide
Connecticut Trust for Historic Preservation
940 Whitney Avenue
Hamden, CT 06517

**RE: Bridgewater Grange Hall
 Proposed Renovation Scope of Work Narrative
 Bridgewater, CT**

The following is a narrative to describe the proposed preservation, renovation and restoration to the existing Bridgewater Grange Hall in an effort to provide a feasible and prudent alternative to demolishing this historic structure. The intent of this narrative is to provide a written description for the basis of design to establish a preliminary budget. The scope of work shall be as follows:

The existing building will be shored and raised as necessary to allow for the removal of the existing foundation. The existing stone foundation walls will be removed and new concrete footings and foundation walls will be provided. The new foundation walls will receive a new stone veneer to replicate the existing stone foundation walls. A new crawl space will be provided with an access hatch located on the rear of the building.

A new two story addition will be added off the rear of the building as to not be visible from the street. This addition has been designed to blend in with the existing architecture. The addition will contain a new egress stairs replacing the metal fire escape as the second means of egress from the second floor. It will also house new bathrooms on both levels. The first floor bathrooms will be handicap accessible. The first floor of the renovated building will have a total of 1,740 Sf. (1,400 sf. of existing building and 340 sf. of new addition). The second floor will have the same square footage as the 1st Floor. The total gross square footage for the entire building will be 3,480 sf. (2800 sf. existing and 680 sf. new addition) as measured from the outside face of the exterior walls. This is comparable to the proposed new building which has a total of 3,494 gross square feet.

The first floor will continue to function as an assembly hall. The entire floor will be gutted and the existing layout will be slightly altered. The existing structural columns in the center of the existing assembly hall will be removed as new steel framing will be provided to support the floor above. The existing entry door locations shall be continued. A new rear entry/exit door will be provided in the stairs of new addition. The existing stairs leading to the second floor will remain. A new residential grade kitchen will be provided with a service window opening into the assembly hall. The entire floor will be made handicap accessible. Handicap access into the building will be provided by a new sloped walk from the adjacent parking lot into the existing southeast entry door. A new storage closet will be added near the north entry door. A small mechanical room will be provided in the location of the existing mechanical room. Separate handicap accessible lavatories will be provided in the new addition.

The second floor will no longer function as an assembly space as the occupant load needs to be limited to 49 people or less to avoid installing a fire protection sprinkler system. If the occupant load were to exceed 49 people, that floor will need to be classified as an assembly use. Having an assembly use on a floor above the level of exit discharge will require the building to have a sprinkler system. The second floor will contain two new offices at the south end of the

building. Two storage rooms will be provided on the north end of the building, one on each side of the existing stairs. An open multi-purpose room will be provided in the center of the building. The new addition will contain the new egress stairs and bathrooms. New steel columns will be added to support the existing roof trusses. Both floors will have a new 2x6 framed walls with plywood sheathing on the interior face. This new framing will reinforce the existing exterior walls and act as shear walls to resist lateral forces.

The exterior facades of the existing structure shall remain and be fully restored. The existing windows will be replaced with new, energy-star rated windows to match existing. The existing roofing will be removed and a new asphalt roof will be provided. A new cupola will be built to replicate the existing cupola that once graced the roof. The existing clapboard shall remain. Damaged boards and trim shall be replaced. The existing vinyl shutters will be removed and not replaced to return the façade to its original appearance based on historic photos. The existing brick chimneys will be removed. The new addition will be finished to match the existing building.

Environmental

The environmental division of Fuss and O'Neill reviewed the documents provided by the town pertaining to the grange. It was their opinion that the remaining impacted soil at the southeast corner of the building should be considered inaccessible and environmentally isolated under the building and no further excavation or removal is required. If the impacted soil remains, the town would need to enter into a State regulated program with DEEP where an environmental land use restriction (ELUR) would be recorded on the property which requires inaccessible soil to not be excavated or disturbed.

Another option, since the foundation is being replaced, is whether the impacted soil can be removed at the time the new foundation wall is built? A mini excavator or a soil-vac truck could be used to remove the soil, if it is determined feasible to do at the time of construction. This option would require more research and a review of final construction documents.

The asbestos report does not appear complete. There is no testing for the roof, door or window caulking, attic or crawl spaces. There is also no comprehensive hazardous materials survey done of the building, which would commonly review lead paint, waste categorization, and polychlorinated biphenyls (pcb) content and levels. This testing would need to be done to accurately secure pricing for removal or remediation of hazards.

Outline Specifications:

Site Work:

- Provide excavation as required to raise the building and install be foundation.
- Backfill excavation and provide finish grading.
- Remove existing stone steps and north entry doors and reinstall after foundation work is complete.
- Provide new granite steps and landing at existing south entry door. Set landing flush with 1st floor to allow handicap accessibility.
- Provide new concrete ramp/sloped walk to connect south entry stoop to existing parking lot. A designated handicap parking space with proper signage shall be provided in such lot.
- Provide a new concrete side walk to connect new rear entry to existing parking lot at the south side of the site.

Foundation:

- Provide new 1'-10" wide x 10" deep continuous concrete spread footings around the entire perimeter of the building. Footings shall be set on undisturbed earth.
- Provide new 10" thick concrete foundation walls with rebar per structural engineer's specifications.

- Provide new 2'-0"x2'-0"x10" interior concrete pier footings and lally columns per the structural engineer's specifications.
- Provide new 4" concrete slab in crawl space over a 10 mil. poly vapor barrier on 6" of compacted gravel base.
- Provide thin face stone veneer to exposed portions of foundation walls. New stone to match existing stone.

Demolition:

- Remove all interior wall finishes to exposed existing wall framing.
- Remove all existing walls as required to accommodate proposed layout.
- Remove all existing ceiling finishes to exposed existing floor and roof framing assemblies.

Structural Framing:

- Install new 3-2x8 built up intermediate beams at the existing 1st floor framing as indicated on the Proposed Foundation and 1st Floor Framing Plan.
- Provide new 2x8 floor framing at 12" o.c and/or sister existing framing as indicated at existing first floor deck.
- Install 4 new W12x35 steel beams under existing wood beams as indicated on the Proposed Second Floor Framing Plan.
- Remove existing 1st Floor columns and respective lower beams as indicated on the Proposed Second Floor Framing Plan.
- Add new 2x6@16" stud walls on the interior face of the existing exterior walls on both floors. Provide 1/2" plywood sheathing to the interior face (shear walls).
- Provide new 2x8 sister joists at all existing second floor framing as indicated on the Proposed Second Floor Framing Plan
- Provide 8 new tube steel columns, HSS 5x5x5/16" on the first floor under new steel beams as indicated on the Proposed Second Floor Framing Plan.
- Provide 8 new tube steel columns, HSS 5x5x1/4" on the second floor under existing roof trusses as indicated on the Proposed Attic Framing Plan.
- Provide new 2x8 floor joist at 16" o.c. at the 1st and 2nd floors of the new addition.
- Provide new 2x6 ceiling joist at 16" o.c and 2x8 rafters at 16" o.c. at new addition roof framing.
- Provide 2x6 exterior wall framing at 16" o.c. a new addition exterior walls.
- Provide new 2x4 interior wall framing at 16" o.c. at all new walls.
- All existing exterior wall, floor and roof framing shall remain.

New Windows:

- Provide new Andersen Windows 400 series replacement windows. Windows shall meet are current energy efficiency standards with low-e glass. Windows shall be vinyl clad and have a prefinished painter interior finish. Muntin bars shall be provided on both the interior and exterior glass surfaces with a spacer bar between the glass. All hardware shall be white.

Exterior Doors:

- All existing wood exterior doors (3) shall be restored. Scrape and paint. Provide new handicap accessible lever hardware.
- Provide new exterior wood door at new rear addition. Paint. Provide all new hardware.

Interior doors:

- Provide new pre-hung, hardboard Masonite raised panel doors. Provide handicap accessible hardware throughout.

Roofing:

- Remove existing asphalt roof shingles (assume 2 layers) to expose existing roof sheathing.
- Provide ice and water shield along all eaves. Ice and water shield shall extend up roof 2' beyond interior face of exterior wall
- Provide new 30 year architectural roof shingles over 15# roofing felt.
- Provide all prefinished aluminum drip edging.
- Provide new prefinished metal gutter and rain leaders.

Exterior Siding & Trim:

- All existing wood clapboard and trim shall remain. Replace damaged or missing components with new to match existing. Re-secure loose boards.
- Provide new cedar clapboard siding and trim at new addition to match existing.

Insulation:

- Crawl space ceiling: Provide R-30 batt insulation across entire floor area
- Existing exterior walls: Provide 3-1/2 R-15 batt insulation with R-21 at the new 2x6 interior shear walls.
- New exterior walls: Provide R-21 batt insulation
- Attic floor: Provide R-49 batt insulation

Interior Finishes:

- Provide new 5/8" drywall throughout all interior walls and ceilings.
- Restore existing hardwood flooring within the main assembly hall on the 1st floor. Patch and replace damaged or missing areas with new wood to match. Sand and refinish.
- Provide new ceramic floor tile set on 1/2" concrete backer board underlayment in kitchen and all bathrooms.
- Existing treads and risers shall remain at existing stair. Repair and repaint.
- New stairs shall have oak treads (stained) and poplar risers (painted). Provide new hardwood flooring at all stair floors and landing.
- All interior window and door casing trim shall be 1x4 flat stock, paint grade trim.
- Provide 1x6 paint grade wood baseboard trim throughout
- Provide a 1x wood beadboard wainscoting and chair rail throughout all spaces on the 1st floor, except in kitchen, mechanical room and new stairs. All wainscoting shall be painted.
- All ceilings shall have a smooth finish (no popcorn). All ceilings shall be painted white with a flat finish.
- All walls shall be painted with an eggshell finish.
- The existing hardwood floors in the 2nd floor multi-purpose room and storage rooms shall remain. Patch and replace damaged or missing areas with new wood to match. Sand and refinish.
- Provide new hardwood flooring in the in the two new offices. New wood flooring to match existing.

Kitchen:

- Provide residential grade kitchen cabinetry and appliances.
- Provide plastic laminate counter top and backsplash.

Plumbing:

- Remove all existing plumbing fixtures, distribution, drain and waste piping.
- Provide all new plumbing fixtures (American Standard), distribution, drain and waste lines.
- All new supply lines shall be PEX.
- All waste and vent lines shall be PCV.

Mechanical System:

- Remove all existing mechanical systems, furnace and duct work.

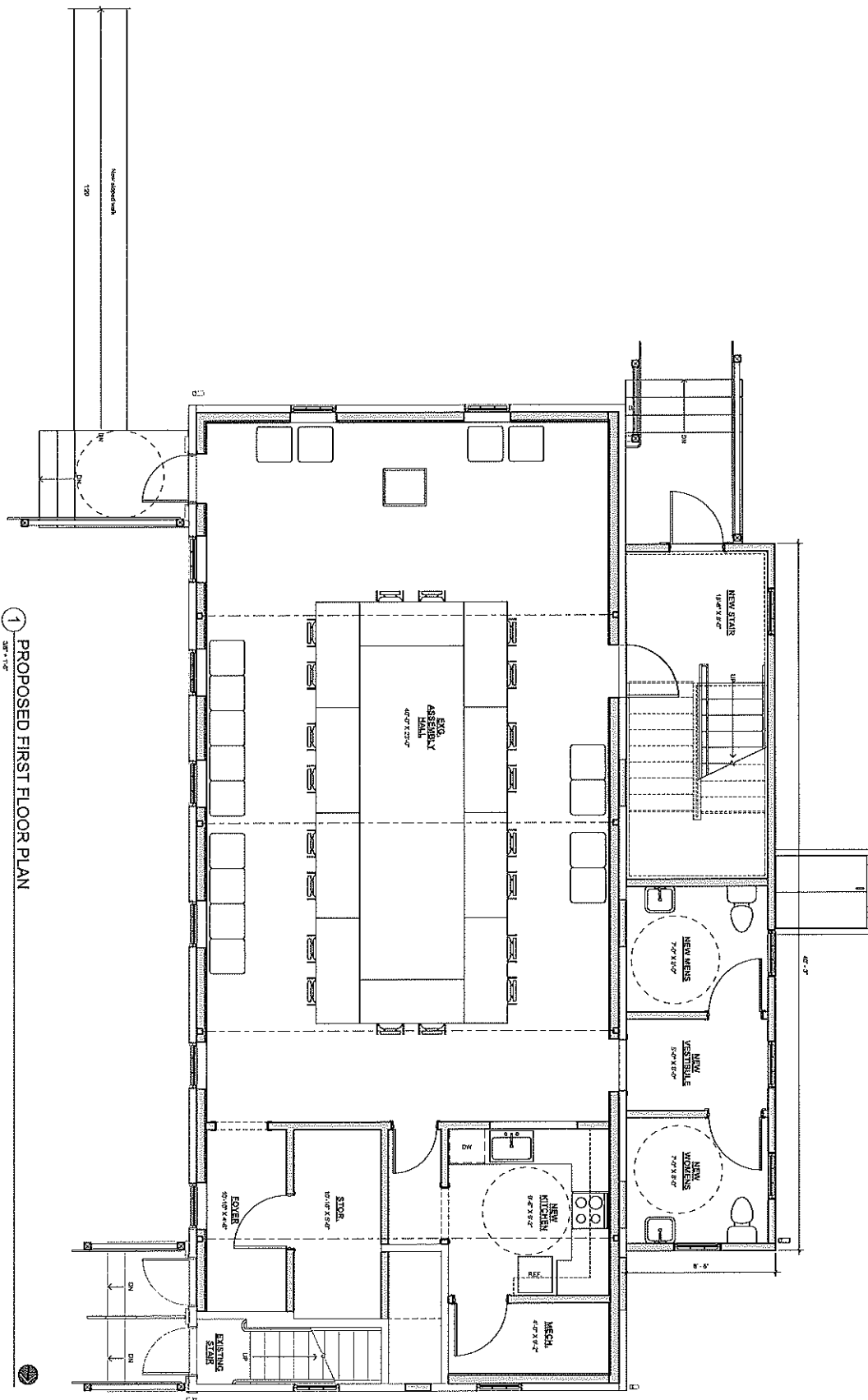
- Provide new furnace and duct work. The 1st floor shall be serviced by duct work located in the crawl space. The 2nd floor shall be serviced by duct work located in the attic.
- Provide new heat pump condensing unit to provide air conditioning utilizing the same duct work.

Electrical:

- Remove all existing electrical devices and distribution back to the main panel.
- Provide all new electrical wiring, outlets, switches and light fixtures to code.

Miscellaneous:

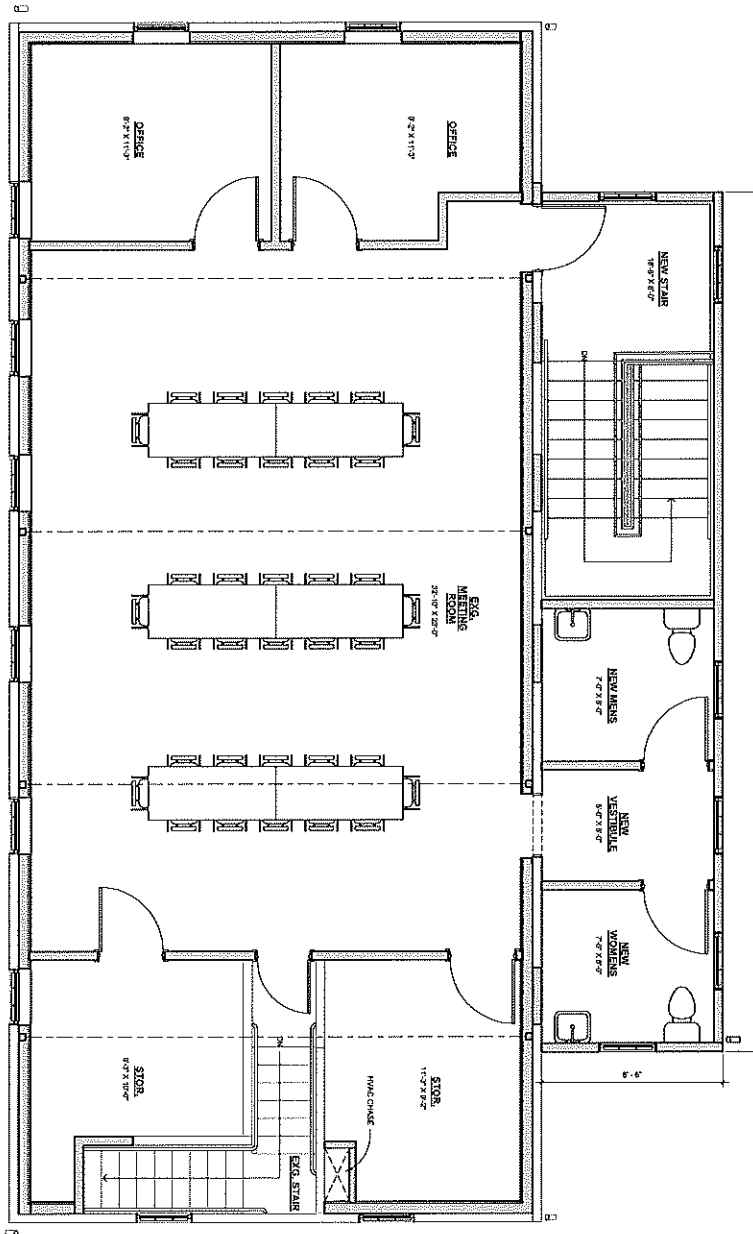
- The grant money that would be used for this renovation will require Davis Bacon wage rates.



OCCUPANCY TABLE		BUILDING SQUARE FOOTAGE		LINETYPE LEGEND	
2ND FLOOR		EXISTING	NEW	TOTAL	
Crane Assembly and Deck S/S	Demolished Crane Assembly (75,000 sq ft) Deck S/S (150,000 sq ft) Unexcavated (150,000 sq ft) = 450,000	137,000 CSF	340,000 CSF	477,000 CSF	INDICATES EXISTING WALL PENDING TO REMAIN
3RD FLOOR					
2ND FLOOR		1,400 CSF	540,000 CSF	1,540,000 CSF	WALL TYPE NEW
2ND FLOOR			480,000 CSF	3,480,000 CSF	WALL TYPE REMAIN
TOTAL		2,300 CSF	480,000 CSF	3,480,000 CSF	

INDICATES EXISTING WALL
FRAMING TO REMAIN

OCCUPANCY TABLE		BUILDING SQUARE FOOTAGE			LINETYPE LEGEND	
EXISTING FLOOR Existing Footprint: 141,000 SF	PROPOSED FLOOR Proposed Footprint: 141,000 SF	EXISTING FLOOR Existing Footprint: 141,000 SF	PROPOSED FLOOR Proposed Footprint: 141,000 SF	EXISTING FLOOR Existing Footprint: 141,000 SF	PROPOSED FLOOR Proposed Footprint: 141,000 SF	EXISTING FLOOR Existing Footprint: 141,000 SF
1ST FLOOR	1ST FLOOR	1ST FLOOR	1ST FLOOR	1ST FLOOR	1ST FLOOR	1ST FLOOR
2ND FLOOR	2ND FLOOR	2ND FLOOR	2ND FLOOR	2ND FLOOR	2ND FLOOR	2ND FLOOR
TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL



1 PROPOSED SECOND FLOOR PLAN



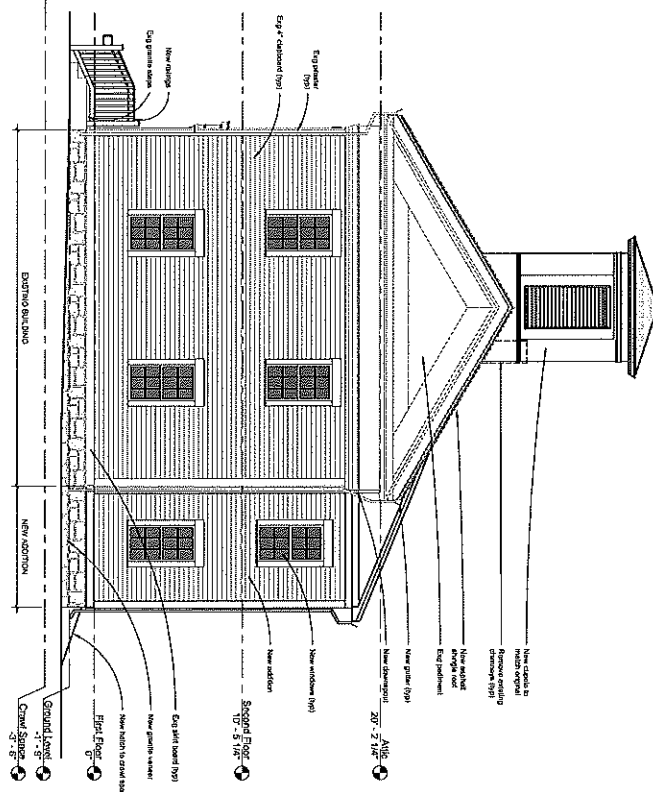
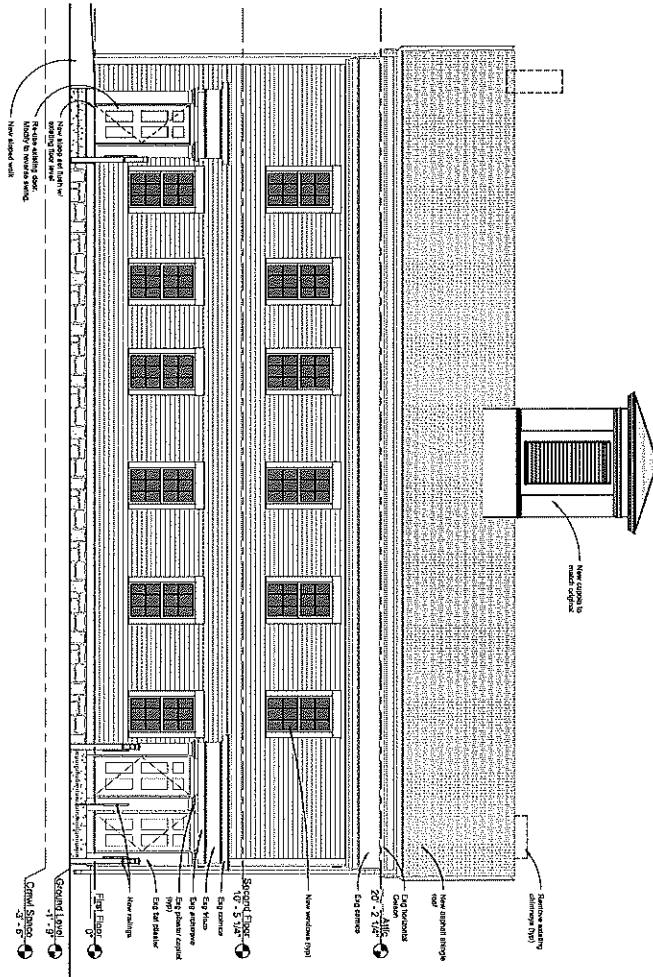
Croskey Architects
Architects
44 Main Street South, Bridgewater, CT 06752
(860) 382-1234
www.croskeyarchitects.com

Bridgewater Grange Hall
44 Main Street South, Bridgewater, CT 06752
Connecticut Trust for Historic Preservation

Drawn: E.A.
Date: 11/27/2018
Scale: 1/8" = 1'-0"
Sheet: 10
Revised:
NO. DATE DESCRIPTION
1 11/27/2018 05/28/2018

A-2
Proposed Second Floor Plan
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1 PROPOSED NORTH ELEVATION
NTA

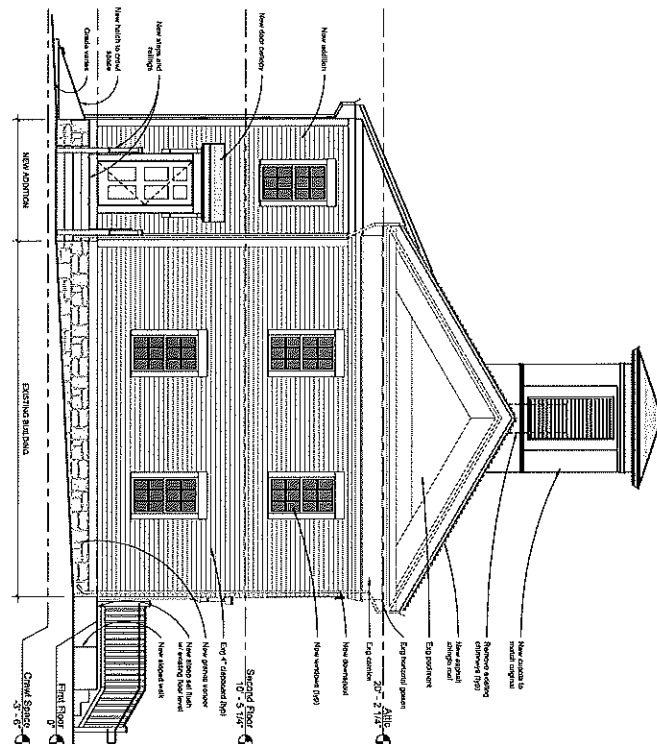


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A-3

Prepared North & East
Developers
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2
M.T.S.

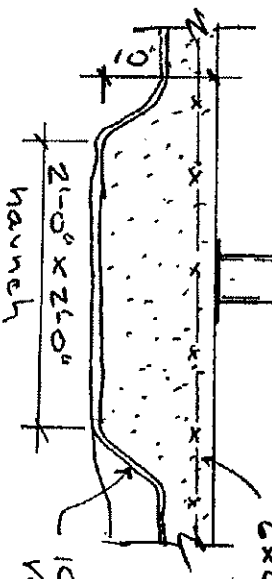
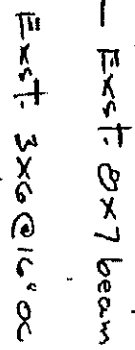


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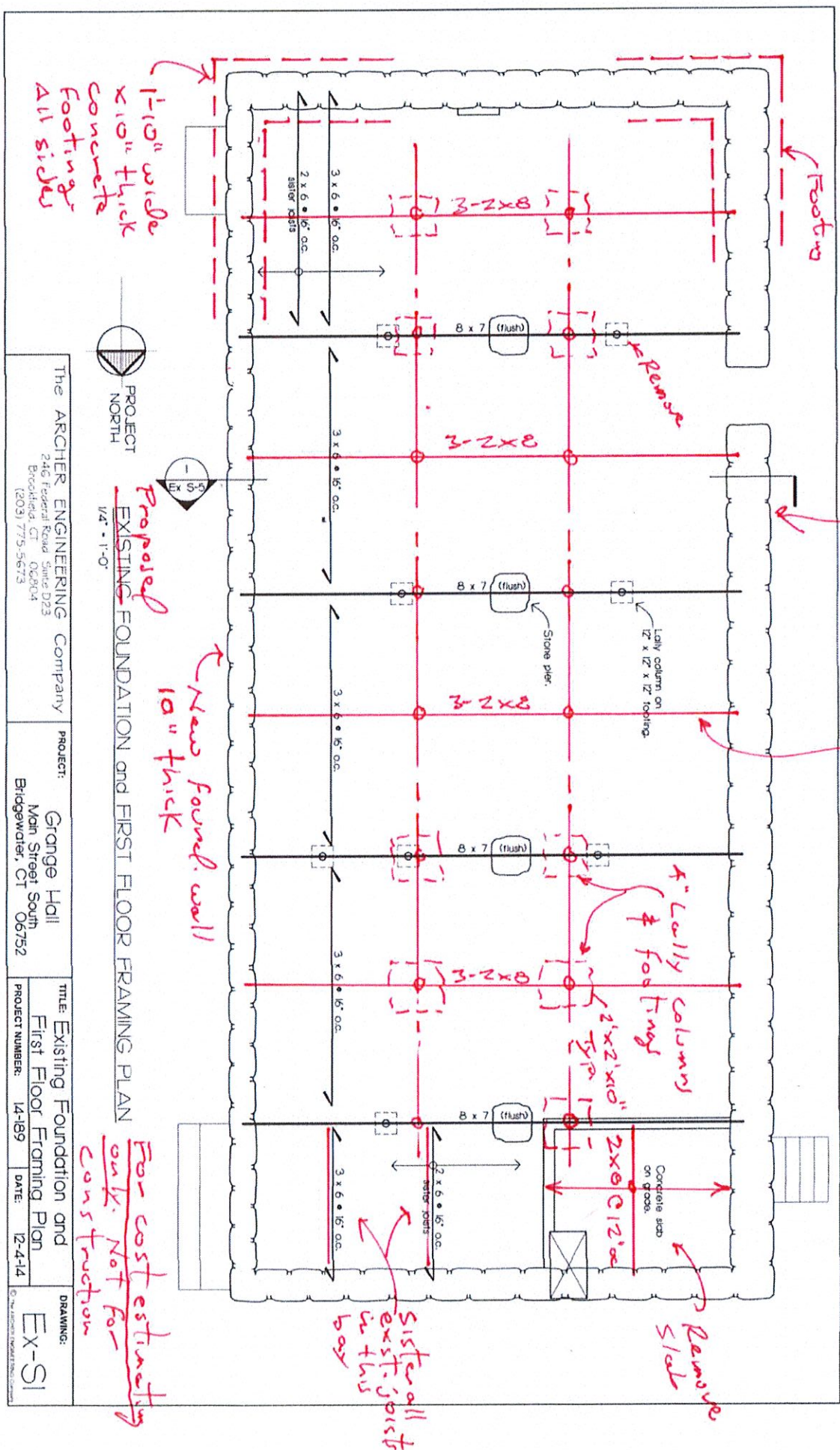
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Bridgewater Grange

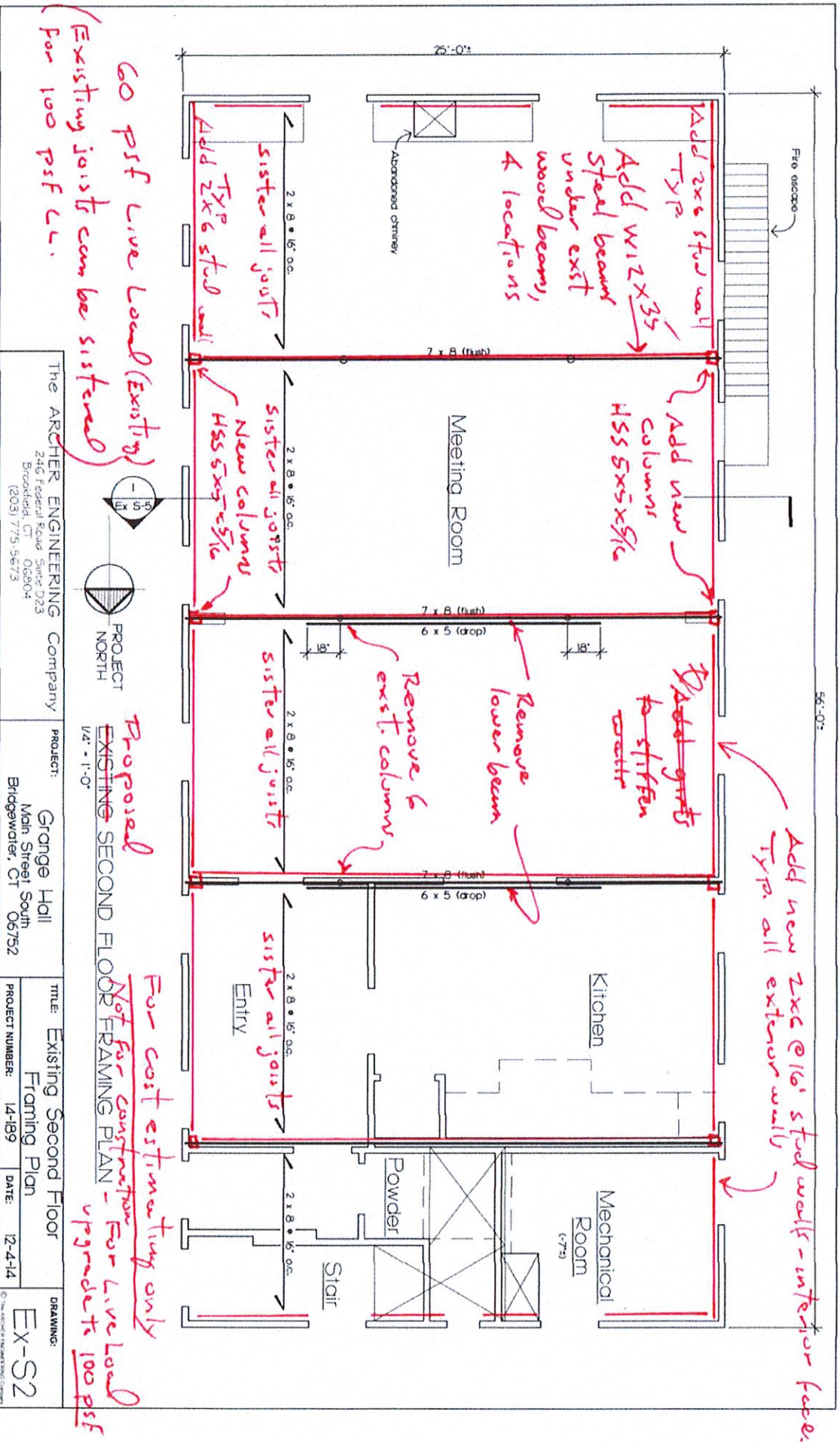


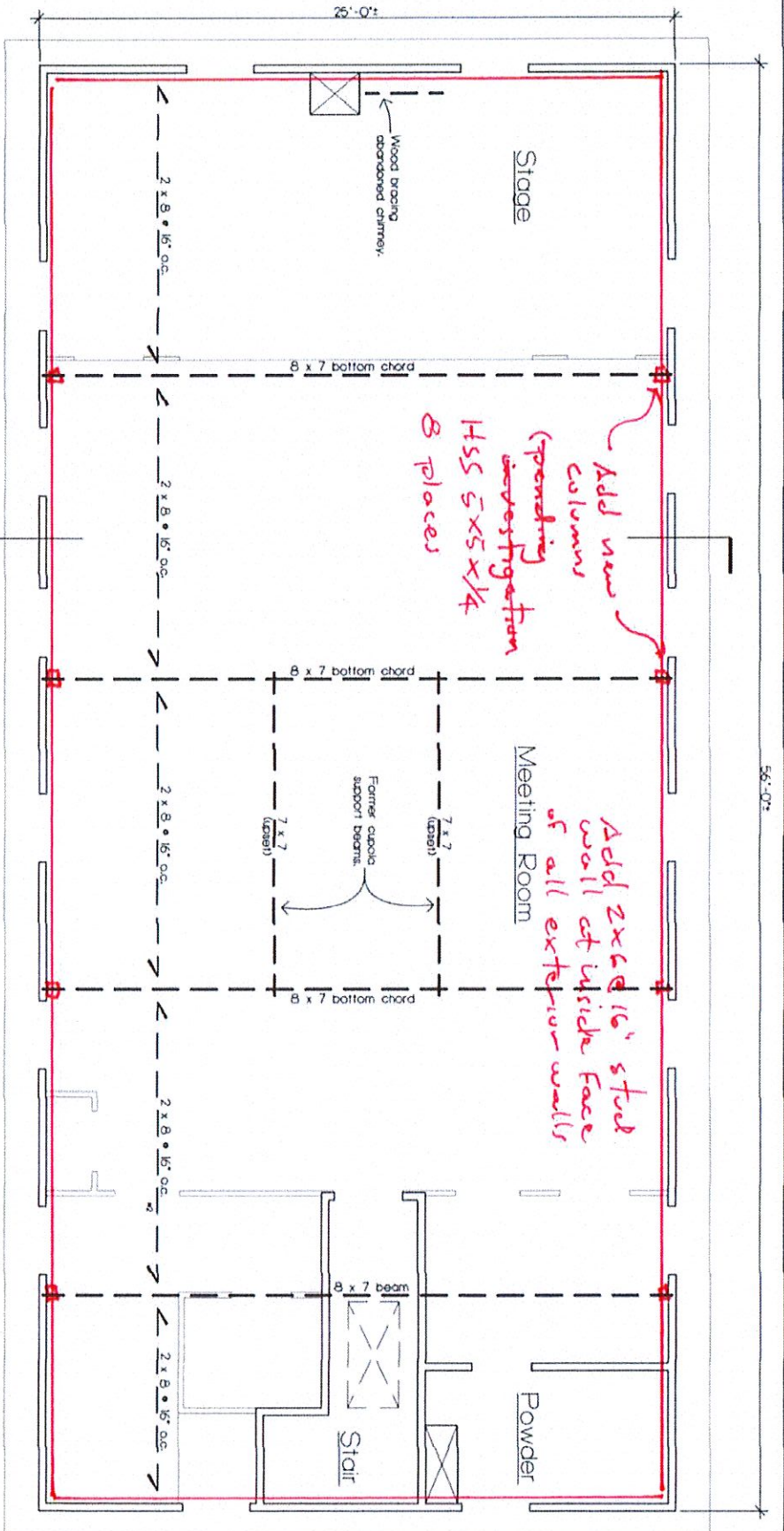
Add intermediate beam,
for 100 pps/Lt



TITLE: Existing Foundation and First Floor Framing Plan	
PROJECT NUMBER: 14-189	DATE: 12-4-14

DRAWING:
Ex-SI





The ARCHER ENGINEERING Company
246 Federal Road Suite D23
Brookfield, CT 06804
(203) 775-5673

PROJECT: Grange Hall
Main Street South
Bridgewater, CT 06752

TITLE: Existing Attic Framing Plan
PROJECT NUMBER: 14-189 DATE: 12-4-14

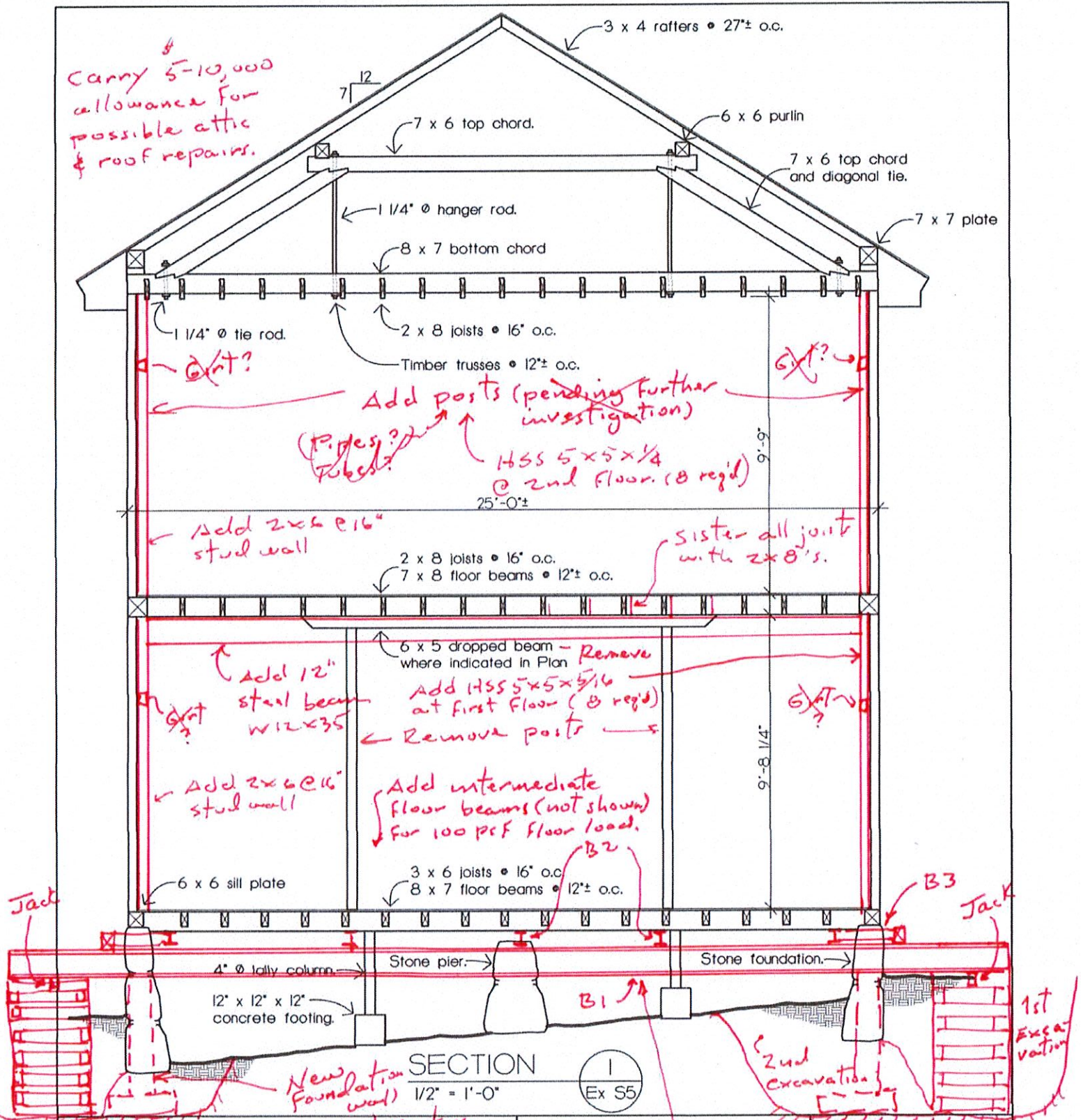
DRAWING: EX-S3



EXISTING ATTIC FRAMING PLAN
1/4" = 1'-0"

For cost estimating only
Not for construction
with columns added

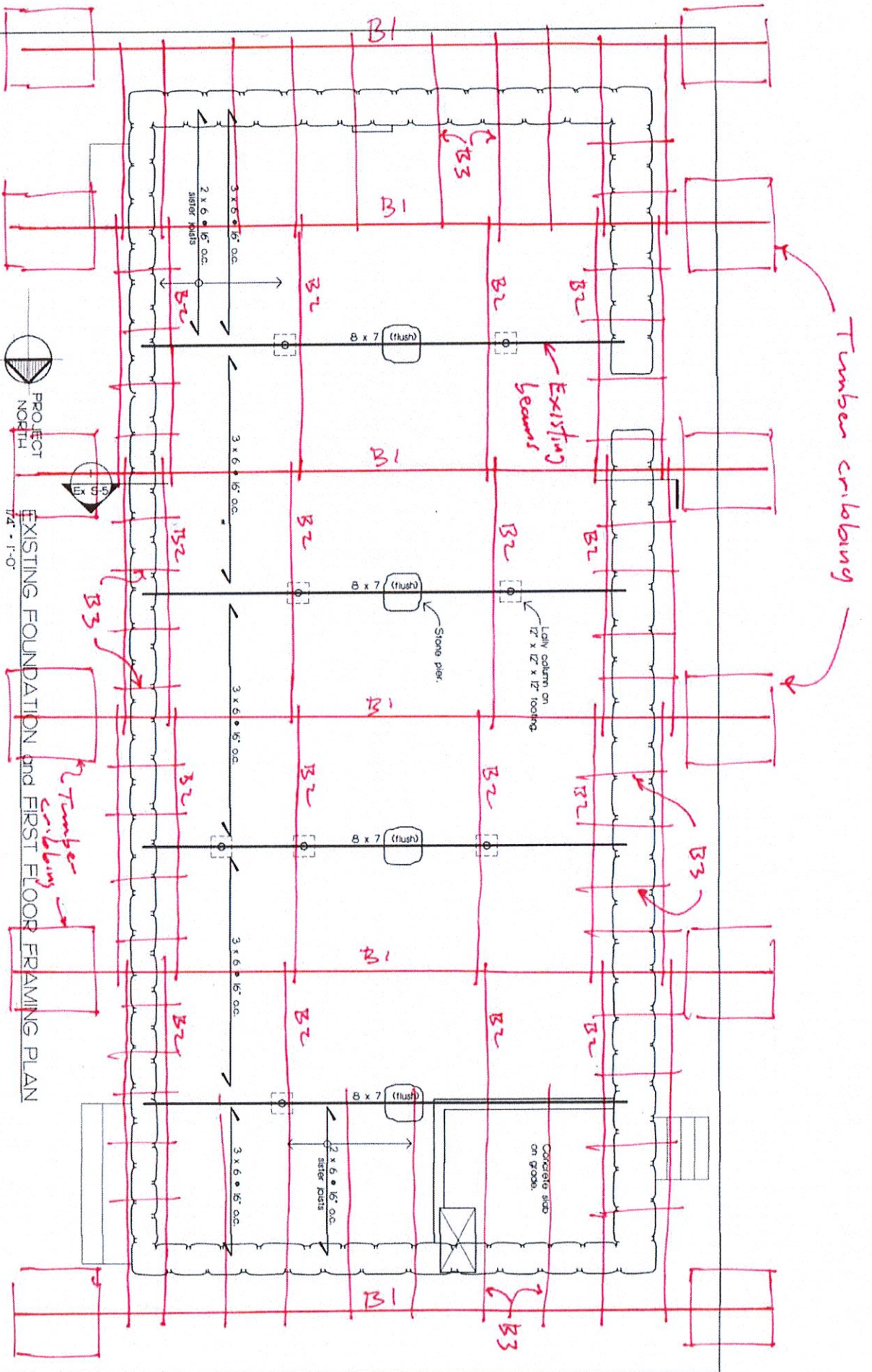
Carry 5-10,000 allowance for possible attic & roof repairs.



SECTION 1
 1/2" = 1'-0" Ex S5

PROJECT: Grange Hall Main Street South Bridgewater, CT 06752	TITLE: Section I	DATE: 12/4/14 PROJECT: 14-189
The ARCHER ENGINEERING Company 246 Federal Road Suite D23 Brookfield, CT 06804 (203) 775-5673		DRAWING: Ex S-5 <small>© The ARCHER ENGINEERING Company</small>

Note: Temporary shoring concept shown for cost estimating only.



The ARCHER ENGINEERING Company 246 Federal Road Suite D23 Branford, CT 06204 (203) 775-5673	PROJECT:	Grange Hall Main Street South Bridgeville, CT 06752	TITLE:	Existing Foundation and First Floor Framing Plan	DRAWING:	EX-SI
	PROJECT NUMBER:	14-189	DATE:	12-4-14		



EXISTING FOUNDATION and FIRST FLOOR FRAMING PLAN
1/4" = 1'-0"

- B1 Main Support Beam - to transfer building support to cribbing
- B2 Transfer Beam - to support existing floor beam
- B3 S.I.I support needle beams

For Cus - Estimating only

Temporary Shoring Concept
to allow removal of existing
stone foundation.