

barrett architecture

FRANK J. BARRETT, JR., A.I.A.

**A Report to the
Bradford Town Select Board
Addressing Questions Raised Concerning
The Current Bradford Town Hall Project**

October 16, 2017

The Bradford Select Board (SB) has, during the past month and on several or more occasions, raised two overarching and inter-related questions concerning the newly initiated re-started construction work on the historic Bradford Town Hall (BTH):

1. How far along can the project get with the funds currently available and assigned to it; and,
2. Will these funds be enough to allow construction work to progress to a point whereby the building can be reoccupied, even though it is assumed that there will still be ongoing construction activity within the building.

The answer to these two important questions requires an understanding of the preliminary construction budget as it applies to the project as it is known at this time; and an understanding of the applicable New Hampshire fire and building codes, and their enforcement, as they specifically apply to this unique project. First, I believe that it is necessary to review the state of the building project as it exists at this time.

THE PRESENT CONDITION OF THE BUILDING AND THE BUILDING SITE

At this time, as we all know, the building has been jacked up and is resting on a temporary system of steel beams and towers of wood cribbing. The installation of a new, poured-in-place reinforced concrete footings and foundation is mostly complete. The goal is to have the building placed back down on the new foundation walls by early in November. However, there is not a functioning septic waste disposal system on the site for the building to hook back into, nor a fully functioning domestic water supply system to serve the needs of the building. Similarly, there is no functioning heating system for the entire building – both the heating equipment and the means of storing fuel have been removed. And the electrical power entrance into the building has been permanently removed from the premises.

Because the building is a heavy two story structure, and has been temporarily supported for an extended period of time (far longer than anyone originally thought would be the case), within the building there have occurred areas of plaster cracking, looseness, and loss – an indication that the building has probably been subject to some amount of torsional movement and wracking over the past many months.

POST OFFICE BOX 55 ■ 215 GATES-BRIGGS BUILDING

WHITE RIVER JUNCTION, VERMONT 05001

TELEPHONE: (802) 296-0004 ■ FACSIMILE: (802) 296-0005 ■ E-MAIL: FRANK.J.BARRETT@MYFAIRPOINT.NET

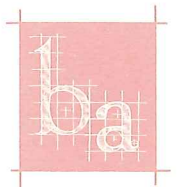
THE BUILDING CODE PROCESS AS APPLICABLE TO THIS PROJECT

It is not an exaggeration to say that within New Hampshire the application of state building and fire codes is at times a complicated matter to understand and follow. None the less, this is a very important matter especially as it applies to this particular project given its recent past history.

There is within New Hampshire what is referred to as the State Fire Code (“Fire Code”), applicable throughout the state, and administered by the State Fire Marshal’s office. This code applies to anything fire related - buildings, burning brush, storage and dispensing gasoline – anything that either involves fire or the potential of fire. And, every fire department within the state is part of that administrative and enforcement effort. As to buildings, typically things like egress and exits, building occupant loads, sprinkler and alarm systems, and general fire safety come under the jurisdiction of the State Fire Code. However, the State Fire Code is not in and of itself a complete building code.

New Hampshire also has adopted a state wide building code, referred to by law as the New Hampshire Building Code (“Building Code”), which is applicable to all buildings other than one and two family residences and certain agricultural buildings and uses, state wide. There is some overlap between the State Fire Code and the New Hampshire State Building Code; however, the Building Code is building specific (whereas the Fire Code is not), and it is far more comprehensive. As an example, the Fire Code does not deal with building structure, whereas the Building Code does. However, as an example, both codes deal with building exits and egress. The administration of the Building Code is left up to each municipality; and it is typically not part of the Fire Marshal’s duties. But, as we remember from several months ago, the FM’s office can be asked to be engaged to render technical assistance to a municipality by a request from the municipality’s governing political body – a select board or a city council. This is what the Town of Bradford chose to do in August. However, at the end of the day, overseeing the proper application and administration of the Building Code is still Bradford’s responsibility, just as the application of the Fire Code is a matter handled by the FM’s office and the Bradford Fire Chief. Within the Town of Bradford, the interpretation, administration, and application of the Building Code is the responsibility of Bradford’s Building Inspector Walter Royal, with, in this particular instance, technical assistance from the FM’s office.

Both Walter Royal and the state FM’s office agreed to let work resume on the temporarily stalled construction project despite the fact full and complete plans and specifications had not yet been completed by the new architectural and engineering (A&E) team. They recognized that a new A & E team had only recently come on board and were in a sense playing catch up with the project; however, with the knowledge that these necessary materials would soon be forthcoming, and with the understanding that a well-qualified general contractor would be hired by the Town to handle all phases of construction as the project moves forward, work was allowed to resume.



Barrett Architecture, PC, in concert with a well-qualified team of structural, mechanical, electrical, plumbing, and fire protection engineers, has committed to the Town of Bradford that by early this coming November full architectural and engineering construction documents for the entire project – all phases – will have been completed and will be on file as the project moves forward, regardless if staged in phases, or done all at one time.

AVAILABLE PROJECT FUNDING

As you may recall, in very early September before a general contractor had been hired by the Town of Bradford to resume construction of the project, Trumbull – Nelson Construction Company, Inc., of Hanover, NH, assembled some amount of an overall very preliminary construction budget for completing what has come to be called “Phase One” – everything including all site work less the elevator equipment and work within the second floor area that stands alone and is independent of the remainder of the project. This did however include all structural repair and up grading, sprinkler, and fire alarm work within the entire building, including the second floor and attic areas. The preliminary estimated cost of all Phase One work, and until more comprehensive estimates are able to be made, stands at approximately \$2,110,415.

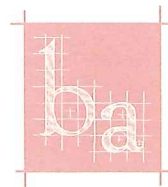
At this time, this writer understands that the Town has about \$500,000 available with which to re-start construction. As a result, the SB has asked for an overview of how far forward that expenditure of money will move the project, and what will be accomplished so as to advance the SB’s stated goal of re-occupying the building sooner than later.

WORK PROPOSED TO BE COMPLETED WITHIN FIVE MONTHS AND WITHIN THE \$500,000 BUDGET ALLOTMENT

The work that is proposed to be undertaken within the five month period starting at the beginning of October and finishing up at the end of February 2018 can be broken down and budgeted as follows:

1. Site work: Includes all foundation excavation, back filling, and temporary grading around the building. \$38,591.
2. Concrete Work: Including finishing forming and pouring the foundation walls, additional interior footings, elevator pit, and lower level concrete floor slabs. \$26,250.
3. Masonry work: Includes all saw cutting of granite foundation facing slabs and installation of same. \$31,823.
4. Carpentry: Includes framing new exterior walls at the rear of the building, framing the new first floor infill area at the southwesterly corner, other first floor interior framing, and structural repair and up-grades throughout the building. \$293,582.
5. Electrical: Includes getting power back into the building, at least temporarily, such that construction work can be ongoing. \$10,361.

At this time, these are preliminary estimate figures, and as better more detailed and complete drawings become available these categories and associated numbers might change. Regardless, the subtotal of the above is: \$400,607.



In addition to the above categories of work, the so-called General Conditions factor needs to be included. Based upon Trumbull – Nelson’s estimate at this time, that cost is \$20,101 per month. This includes telephone, water, toilet, field office, tools and equipment, site safety measures, barriers, temporary heat, snow removal, rubbish removal, project field superintendent, and the project manager.

Assuming five months of construction during this first phase, the general conditions could total as much as \$100,505. The above described phase of work is also labeled “Option Number 2” within the final pages of this report.

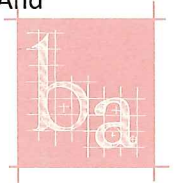
What the above discussion clearly shows is that by the end of this coming February, and the expenditure of approximately \$500,000., the building will be at a very secure and safe place. This includes a fully repaired and upgraded structure with most rough carpentry work completed, but it does not leave the building anywhere near ready for occupancy. Most notable of what is **not included** in this first phase of work are things important to this discussion such as the sprinkler system installed throughout the building, full fire alarm installed throughout the building, a permanent heating system, a permanent electrical entrance and distribution system, a potable water delivery, and a proper plumbing system and on-site septic waste disposal system, to name just a few. Once again I state that the building will be nowhere near ready for occupancy by the end of February.

THE QUESTION OF BUILDING OCCUPANCY V. STATE BUILDING AND FIRE CODES

The question has been asked if arrangements can be made to occupy the building sooner than later, while construction work is still ongoing or temporarily suspended, while additional funding is being secured, but prior Phase 1 (all first floor and lower level work) being completed. The full answer to this question, in my opinion, breaks into three areas of examination.

First, as discussed above, there will not be functioning water, plumbing, heating, septic, and life safety systems in place by that time. There simply is not on hand available funding to pay for this necessary work.

Secondly is the matter of the applicable state building and fire codes as they apply to this project. The Building Code requires that a Certificate of Occupancy (CO) be issued by the Authority Having Jurisdiction (AHJ). In this case that would be Walter Royal, Bradford’s Building Inspector. Although the State Fire Marshal’s office has been retained by the Town in an advisory capacity to work with the Building Inspector, the FM’s office is not the AHJ, nor does it issue any type of a CO. However, the FM’s office can step in and prevent occupancy of the building if they believe that certain applicable requirements of the State’s Fire Code are not being met – fire life safety things such as sprinklers and fire alarms, as an example. Likewise, if the Bradford Fire Chief believes that there are violations of the Fire Code he has enforcement powers as well, working with the FM’s office. The net effect of all this is that to re-occupy the building prior to the building being made ready would require variances to both the state building and fire codes. My experience over the many years is that when seeking variances, such as would be required here, there would need to be something offered to compensate for the lack of life safety features not yet installed within the building, and I don’t know what that would be. And



there is no incentive for the FM, the Building Inspector, or the Fire Chief to want to “look the other way”, so to say, concerning these matters. Lastly is a question for both the Select Board and the citizens of Bradford: Do you want to put Town staff, and the public that would be using the facility, back into a building that is potentially unsafe and in all probability containing an unhealthy environment?

The third factor that comes my mind concerns the potentially litigious world of insurances. I strongly suspect that both the Town’s and the general contractor’s insurance carriers would be unquestionably opposed to the idea of the building being re-occupied while construction was ongoing, or the building was far less then complete, safe, or providing a healthy environment.

The question has been asked of this writer of what is the minimal expenditure that the Town could make, at this time, to make the building legally and safely habitable. I will address that in my remaining remarks below.

POTENTIAL OPTIONS FOR MOVING FORWARD

Although not specifically requested by the Select Board, but I believe integral with the above overall discussion, is the question of what the Town’s options are, given the unfortunate circumstances so uniquely present with this project. As an over view, I believe that at this time they break down as follows, in no particular order of ranking or preference by the Architect:

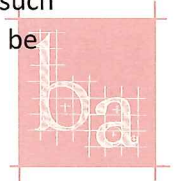
Option Number 1:

Set the building back down, enclose underneath and around it, repair damaged sills, properly anchor the building to the new foundation walls, and take a break. The downside becomes the important necessity of having to maintain a minimal amount of heat in the lower level of the uninsulated building, at about a temperature of 45 degrees, so as to protect the new concrete foundations and interior column footings. But, aside from the cost of the heat, this option might save \$200,000 of the available cash on hand. This option could easily be done and given the circumstances the Town could maintain a working relationship with Trumbull –Nelson so as to be able to re-start the project at a future date, and then to continue to move it forward. However, this option could also conversely give the project an increased reputation of a troubled project (lack of funding, local political infighting, general indecisiveness) that could cause other future general and sub-contractors to be really leery of the project and therefore stay away from wanting to be involved in it.

Cost Estimate: The Funds Presently on Hand of \$275,000.

Option Number 2:

All of the above plus other additional work as outlined earlier in this memo. The benefit is that it gets the building that much further along with rough carpentry work completed that is unescapable and unavoidable if the building is to ever be used by anybody in the future, no matter the use – town hall, an apartment building, home for the aged, so forth and so on. The down side is that unless there were to be future funds appropriated to finish the project such that the building, at least on the first floor, was to be usable, by next fall the Town would be



faced with having to minimally heat the building for who knows how many winters to come. Simply stated, not minimally heating the building the Town will risk, over a relatively short period of time, much of the recent investment made in the building to date. And, just as with the first option, this option would also perhaps be fraught with the potential of giving an already troubled project an increased bad reputation.

Cost Estimate: The Funds Presently on Hand of \$500,000.

Option Number 3:

Apply enough additional funding, yet to be raised, to get the first floor of the building such that it could be legally and safely re-occupied, although not cosmetically or otherwise completed. This option would require all of the above work as part of Option Number 2 to be completed, as well as all fire life safety systems to be complete (sprinkler and fire alarm installed throughout the entire building), all water supply, mechanical (heating and ventilating), electrical, and plumbing systems in place, all interior rough carpentry and drywall / plaster work completed, and site improvement such as the new electrical service entrance and septic system in place, as well as and a minimal amount of parking, walkways, and rough site grading completed. Things like interior and exterior painting, interior and exterior trim, window repair, floor finishes, and some amount of permanent lighting would not be included.

Cost Estimate: The Funds Presently on Hand + an Additional Expenditure of \$1,140,000.

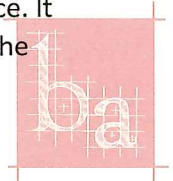
Option Number 4:

Go for the funding to completely finish at least the first floor of the project such that the building is safely, legally, and appropriately re-occupied, all exterior and interior trim, finishes, and paint work is complete; and such that it utilizes the present NH LCHIP funds presently available to the project. With that said, there is simply no escaping the fact that the additional cost of doing so is about \$1.5 million; and there is no amount of wishing or a silver bullet that would suggest otherwise. On the positive side of the ledger with this option is that before this calendar year is out, the Town will have very exact cost figures for precisely what the total cost of this option will be. However, I am confident that the overall bottom line is not going to be greatly different from what it is now. The figure stated below represents an increase of \$360,000 over option Number 3 outlined above.

Cost Estimate: The Funds on Hand + an Additional Expenditure of \$1,500,000.

Option Number 5:

This is a complete reversal of the previous four options offered above, and this option is to simply and immediately abandon the project in a way that could be seen by some as the Town decisively cutting its past, present, and future losses concerning the project. By abandoning the project, this would include permanently stopping all ongoing architectural, engineering, and construction work. The building and the site could be either sold to an outside private party, or re-purposed to become the site of a new town hall / municipal building erected in its place. It seems to this writer that selling the property for whatever a private party might pay for the



premises could perhaps yield \$20,000. Conversely, keeping the property but completely razing the existing historic building, including the newly completed reinforced concrete foundations could cost an estimated \$45,000. Were the latter to be the case, keeping the property and re-purposing it could cost as follows.

On the surface, the concept of a nice new simple single story concrete slab on grade building might have a lot of appeal. After all, the Town of Bradford already owns the property debt free. However, based upon the planning work done most recently by this architect, as well as three (3) past architects, all indicates that a new municipal building / town hall, less police and fire department functions, would need to contain at least 5,200 or more gross square feet of floor area. And this would only include meeting room space to accommodate about 75 persons. Assuming that the sprinkler mandate could be avoided, such a building as a minimum would cost at least \$225 per square foot. Simply stated, this option begins to look like the following:

Existing building demolition and disposal:	\$45,000.
5,200 s/f X \$225 per s/f:	1,170,000.
Site improvements:	50,000.
15 percent contingency factor:	175,000.
6 percent architectural and engineering fees:	70,200.
The amount of money spent on the existing building to date in 2017 that would not be recoverable, both hard and soft costs:	<u>218,932.</u>
 Total of the above:	 \$1,729,132.

It is important to keep in mind that the above conceptual cost scenario portrays a very simple and basic building that would probably not have the seating capacity for the annual Bradford town meeting or other large public / civic functions.. And therefore could perhaps be viewed as not meeting the Town's needs. And the stated figure of \$225 per square foot of new building cost could prove to be a little on the light side, and that is in part why I plugged in a contingency factor. It goes without saying that in selecting this option, the Town would need to decline the \$105,000 in LCHIP funding and return all funds donated for the restoration and renovation of the historic Town Hall. Regardless, I believe that this option presents to both the SB and to the public an important option potentially for comparison purposes if nothing else.

Cost Estimate: \$1,800,000.

It is my sincere hope that you, the Bradford Town Select Board, as well as members of the Town Hall Restoration Oversight Committee and the general public will find the above material helpful as the community attempts to sort its way through and understand this complicated matter. Thank you for your time and attention as you consider these important issues; and I look forward to discussing them further at the regularly scheduled Bradford Select Board meeting on October 16, 2017. Respectfully submitted.

Frank J. Barrett, Jr., A.I.A.
Architect

