Laurie Leader - Re: 120 Noyes Street BP#2014-00342 Plan review comments

From: Laurie Leader
To: Muto, Gerald
Date: 3/17/2014 9:58 AM
Subject: Re: 120 Noyes Street BP#2014-00342 Plan review comments

Gerald-

A concrete floor in this additional uninhabitable space, drainage underneath leading to a sump pump, crushed stone and a vapor barrier will meet code. The foundation walls will need to be damp proofed as shown on the plans. The permit approval will include a copy of changes according our discussion per this email.

Thanks,

Laurie

>>> Gerald Muto <mutoj@comcast.net> 3/14/2014 10:44 PM >>>
Laurie,

Again, thanks for answering my email so quickly.

If I am understanding you, as long as the space under the entrance floor is "uninhabitable " it can be less than 6'8" , as long as the other items are satisfied (cement floor or ventilation, and an access "door" the proper size.

There would be a cement floor with drainage underneath, leading to a sump pump. Besides crushed stone there will be styrofoam under the cement. So we would not need any ventilation. At the bottom of the basement stairs there would be an access "door" to that small area under the entrance floor that would satisfy that requirement.

If this is acceptable, that is what we would like to do.

If you would feel better if we spoke in person, I could meet you at your office next Thursday ,March 20, (preferably not early as I will be getting home about 2am.) or Friday morning early (as I am headed to Boston for the day and could stop on my way.)

Let me know if you would like to meet, or if my explanation is enough.

Thanks again,

Jerry

Sent from my iPad

On Mar 14, 2014, at 3:06 PM, "Laurie Leader" <LRL@portlandmaine.gov> wrote:

Gerald-

Below are the basement, ventilation and access standards. If you provide vapor barrier and a concrete slab, you will not need to provide ventilation. If you do not have a slab, you will need to provide ventilation according the code as described below.

R305.1.1 Basements. Portions of *basements* that do not contain *habitable space*, hallways, bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

Exception: Beams, girders, ducts or other obstructions may project to within 6 feet 4 inches (1931 mm) of the finished floor.

R408.1 Ventilation. The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a *basement*) shall have ventilation openings through foundation walls or exterior walls. The minimum net area of ventilation openings shall not be less than 1 square foot (0.0929 m^2) for each 150 square feet (14 m^2) of under-floor space area, unless the ground surface is covered by a Class 1 vapor retarder material. When a Class 1 vapor retarder material is used, the minimum net area of ventilation openings shall not be less than 1 square foot (0.0929 m^2) for each 1,500 square feet (140 m^2) of under-floor space area. One such ventilating opening shall be within 3 feet (914 mm) of each corner of the building.

R408.4 Access. Access shall be provided to all under-floor spaces. Access openings through the floor shall be a minimum of 18 inches by 24 inches (457 mm by 610 mm). Openings through a perimeter wall shall be not less than 16 inches by 24 inches (407 mm by 610 mm). When any portion of the through-wall access is below *grade*, an areaway not less than 16 inches by 24 inches (407 mm by 610 mm) shall be provided. The bottom of the areaway shall be below the threshold of the access opening. Through wall access openings shall not be located under a door to the residence. See Section M1305.1.4 for access requirements where mechanical *equipment* is located under floors.

If you have any questions or further clarification, feel free to email or call.

Thanks,

Laurie

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>>> Gerald Muto <mutoj@comcast.net> 3/14/2014 8:41 AM >>>
Laurie,

Thank you for getting back to me so promptly. I appreciate you looking at my notes, and deciphering them.

After much back and forth with the owners and the Architect, we have a question. A little explanation first might help.

The existing headroom in the basement is 6'2". This is my constraint as I build the basement stairs, and for the door at the bottom. Not a problem, I can still provide an exterior metal fire door at the bottom, and the stairs will be code. I just can't change what exists when I get there. Even if the new basement floor was lowered so the remainder of the new basement allowed 6'8" headroom, it would not change the stairs or the door entering the existing basement. It is what it is.

The reason the first floor of the addition is stepped is so the owners can maintain access to their backyard between the exterior porch/entrance stairs and their existing garage. If the floor was kept at the same level as the house , any stairs would essentially block access from their driveway. (The garage is not drawn on the plans, but is about even with the side of their house).

So the Architect dropped the floor once coming out of the kitchen (6"), and again before the entrance door (7.25") so the porch/entrance stairs would not extend too far.

So to make the remainder of the basement 6'8" headroom, the new floor would have to be much below the existing one. The math is 6" to make up for the existing headroom at 6'2", another 6" because of the first step out if the kitchen, and 7.25" for the second step in the entrance floor, for a total of 19.25".

Since the new basement is so small, and is essentially cut in half by the stairs, it didn't seem worth the effort. The excavation of that distance will require a "retaining cement wall" so as not to undermine the existing foundation.

I have done this before, so it can be done. And the customer is willing to do it, if that is what it takes to satisfy the Code. The question is, what would constitute a "crawl space"? The remainder of that basement is small, there will be a sump pump in it (I don't take any chances), and the stairs take up a good portion of it.

Is there anything in the code that might allow is to leave the new basement floor even with the existing basement floor?

Let me know if you have any questions and I will reply as soon as I can.

Thanks again for doing this over email.

Jerry

Sent from my iPad

On Mar 13, 2014, at 1:43 PM, "Laurie Leader" <LRL@portlandmaine.gov> wrote:

Gerald,

Please see below. If you agree to this note, we will save this email and will be added as part of the approved drawings and permit can be issued. Please reply back and thanks.

Laurie

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>>> Gerald Muto <mutoj@comcast.net> 3/12/2014 3:58 PM >>>
Laurie,

Thanks for reviewing the plans promptly. I am presently in St. Maarten, and have only my iPad to work from. I can answer all the questions, but can not provide drawings. I will answer them referring directly to the PDF file name.

I hope this will suffice. I will be home on Thursday, March 20 and could provide drawings then if necessary. In the meantime please feel free to check with George, who inspected 38 Longfellow street for me, and Brian, who just inspected 93 Pitt Street. I think you will find that I do my best to satisfy the code, that I want to do it right, and this project will be no different.

I would like to move this along, and hope that my inability to provide drawings will not hinder that.

So here goes:

A-100 Foundation Plan
-New Foundation Anchoring- pins will be drilled into the existing foundation and tied into rebar in foundation.
-header over basement door- 4- 2x8 kid screwed together as a header (to match existing floor framing)

A-101 First Floor Plan
- stairway -rise is 7&3/8" , run is 10", tread is 11", railing is continuous at 36" from nose
-headroom is to 6'8" or as much as possible ***Must be 6'8" or greater***

-tempered glass as you have indicated (windows have not been ordered)
-Porch Details-framing to be 2x8 pressure treated, only 2 rises of 7&3/8" supported a triple 2x8 beam which is supported by footing tubes 48" or greater into ground. Joists will be hung from floor rim by joist hangers. Decking to be Azek.

A-102 Second Floor Plan
- tempered window in Shower (again the windows are not ordered.)

Framing Crossection
-rafter and ceiling joist framing is 16" oc
-all floor sheathing is 3-4" Advantech
-all wall sheathing is 1/2" CDX Plywood
-all roof sheathing is 5/8" Advantech
-insulation values on A-101, but are as follows:
-walls R-26
-roof. R-50
-all rim joists R-26
- all MEP penetrations air sealed
- vent channels as needed
-Framing tie in details- new ridge pole set in existing wall the depth of the existing wall framing, supported by studs/posts to ground.
-foundation to be 8" wide, supported on a footing that is 16" wide and 8" deep,with footing set so new cement floor lines up with existing.
-Porch details -see A-101

Please let me know if you have any other questions, or need further explanations.

You can reach me at this email address.

Thanks,

Jerry Mutoj

Sent from my iPad

On Mar 12, 2014, at 1:35 PM, "Laurie Leader" <LRL@portlandmaine.gov> wrote:

> Gerald-
> I have completed the review of the above project for building code and have the following comments as noted on the attached files.
> Please send all revisions to this (my) email and please note that the pdf file name shall be exactly as the original, refer to the name of the attached files. Our Eplan program will automatically assign a version to the revised plans.
> Let me know if you have any questions,
> Thanks,
>
> Laurie
> Laurie Leader
> Plan Review/Code Enforcement
> City of Portland, Maine

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