



Meetings are open to the public. Face masks and social distancing may be used at the discretion of each individual. The Board of Aldermen reserve the right to make changes to this policy, as needed to help prevent the spread of the Coronavirus.

ETHICS STATEMENT:

“If any members know of any conflict of interest or the appearance of a conflict of interest concerning matters on the agenda, please so state at this time.”

A. Call to Order

B. Pledge of Allegiance

C. Explanation of Quasi-Judicial Process

D. Explanation of Quasi-Judicial Process

E. Approval of Minutes

1. January 28, 2025 Board of Adjustment Minutes

F. Closed Session NCGS 143-318.11

1. Motion to go into closed session pursuant to NCGS 143-318.11

(3) To consult with an attorney employed or retained by the public body in order to preserve the attorney-client privilege between the attorney and the public body, which privilege is hereby acknowledged.

2. Motion to close the Closed Session and re-enter the Regular Session.

G. Old Business

1. 406 Brunswick St Floodplain Appeal Continuance [Maureen Meehan]

H. Other Business

I. Adjourn



CITY OF SOUTHPORT
ZONING BOARD OF ADJUSTMENT
REGULAR MEETING
113 W. MOORE STREET
January 28, 2025
4:30 PM

Minutes

Members Present: Pete Haislip, Harley Lemons, Jason Robbins, Tuck Masker, Steve Doshier
Rodney Ross, John Allen, Chris Eckert

Staff Present: Maureen Meehan, Planning Services Director
Tori Deviney, Deputy Clerk
Wendell Biddle, City Planner

A. Chair Haislip called the meeting to order at 4:31 PM

B. Chair Haislip led everyone in the Pledge of Allegiance

C. Swearing-In of New Members

John Allen, Steve Doshier, Chris Eckert and Rodney Ross were sworn in by Deputy Clerk Deviney.

D. Selection of Chair

The meeting proceeded with the chair being turned over to Mr. Robbins for the purpose of nominating a new chair. **Mr. Lemons made a motion, which was seconded by Mr. Allen, and a unanimous vote in favor, and the motion passed with all ayes.**

Mr. Robbins then opened the floor for nominations for chair. Mr. Lemons nominated Mr. Haislip for the position. With no other nominations presented, the motion was seconded by Mr. Allen. **A unanimous vote in favor, and the motion passed with all ayes**, confirming Mr. Pete Haislip as the chair.

E. Selection of Vice Chair

A motion was made by Mr. Allen to turn the chair back over to Mr. Haislip. The motion was seconded by Mr. Masker and passed unanimously with all ayes.

Mr. Lemons then made a motion to nominate Mr. Robbins as vice chair, which was seconded by Mr. Masker. With no other nominations presented, the motion passed unanimously with all ayes.

F. Explanation of Quasi-Judicial Process

1. Quasi-Judicial Process

Chair Haislip provided an overview of the quasi-judicial process for the public.

When asked if there were any conflicts of interest, Mr. Lemons disclosed that he is friends with the applicant for 406 West Brunswick Street, Mr. Howard. He mentioned that they regularly have coffee together each morning at the round table at Local's. However, Mr. Lemons clarified that he has nothing to gain from the case.

No other members had any questions or concerns.

G. Approval of Minutes

1. Approval of Board of Adjustments January 7th, 2025 Meeting

One correction has been made on the January 7, 2025 minutes per Mr. Lemons

1.) Motion #4- Should be a nay vote for Mr. Lemons

H. New Business

1. 406 Brunswick St Floodplain Appeal [Mo Meehan]

Ms. Meehan:

Good evening, chair members of the board of adjustment. This evening, our first case is an appeal of administrative decision. Representatives for the property owner submitted a notice of the appeal of the order to take corrective action, which was issued by the flood plain administrator for a violation to the city's flood plain ordinance.

The property is located at four of six Brunswick Street. It is within the Yacht Basin area of the city for vicinity location. The property is zoned R 10, and it is approximately a half an acre in size. This property is also on the National Register Historic District, and it is contributing structure, and it was built in 1877. This shows that also the property is located located in a special flood hazard area, which requires some different standards for construction and elevation for single family homes that the property itself is in three separate flood areas, in x zone, the 8011 and the coastal A zone. The Coastal A zone is the most restrictive, and requires elevations built to the V zone standards, which requires no obstruction from water or movement under the home, so you cannot have any elevated or any structures lowered enclosures under the house. So that shows, and the square on that graphic is showing approximately where the home is. So you can see that a portion of the home is within that coastal A zone.

So the applicants came to staff in January of 2023 for a building permit to put an addition onto this home, the existing home, they were going to be demolishing a portion of and a second or another addition that was it was still considered historic, but it was an addition to the main structure, and they were demolishing that, including this new structure.

On this survey, you will see, and there's also in your packet, the darker shaded area is the footprint the new addition that is being requested. And then you can see the elevations on the building plans that were submitted. Of the higher structure is the new addition that is being proposed.

Staff reviewed this project found that it potentially could be what is considered a substantial improvement, that that is defined as increasing the value of the structure.

The construction costs of the structure is greater than 50% of the appraised value of the structure.

So there were concerns, and staff wanted to make sure that they were going to be meeting those standards. So again, I want to give you a definition of substantial improvement.

Sorry, I thought I was having on my screen, but excuse me, it means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure taking place during any one year period for which the cost equals or exceeds 50% of the market value of the structure before the start of the construction of the improvement. This term includes the structures which have incurred substantial damage regardless of the actual repair work performed. The term does not, however, include any correction of existing violation of state or community health sanitary or safety code specifications which have been identified by the community code enforcement officials and which are the minimum necessary to assure safe living conditions or any alteration of a historic structure, provided that the alteration will not preclude the structures continued designation as a historic structure, and the alteration is approved by variance issued pursuant to section 5.18 of the city's floodplain order.

So going back, the property owners did not want to try to change their structure, so they asked for a variance from the flood plain ordinance, and that variance was requested in July contention, the July 2023, board of adjustment meeting for a hearing.

They were stating that they wanted to get a relief from section 5.25 the standards for coastal A zones, since the addition is not located in the coastal A zone, only one corner of the home is located in that and that it was a historic structure that could be, could be, be excluded for the variance.

The variance was heard. There was no decision made at this hearing. There were some concerns about the CRS program, which is the program that allows the communities to have a lower flood insurance if the community meets certain standards, and in that end, so the city is part of that. And a word that that would decrease the discount of the insurance that would be required.

Mr. Haislip:

Can either you or Wendell maybe give a more of a description or definition of what the CRS is, because Wendell opened my eyes a little bit at a prior meeting

Ms. Meehan

Absolutely. So the CRS is the community rating system. So there are different steps that communities that are within the national flood plain assurance program can elect to choose to be part of the CRS program. And there are different thresholds to these and the the discount can be from 5% up to 45% and you have to meet certain thresholds of each one. So at this current time, the city of Southport receives a 15% discount on insurance, and that is citywide. So even if you not in a flood zone and you want to carry flood insurance, you receive a 15% discount on your flood insurance, but you have the city has to meet certain standards, and if there's any violations of the of the floodplain ordinance, that can, make reductions in that, in this, in the total scoring, which could reduce The discount again...

Mr. Haislip:

That's good for me. Okay?

Mr. Ross:

What's the current status of the non compliant pieces of property? How many are there?

Ms. Meehan:

There are there's one that we are aware of, yes, so this is the one that's in violation right now that we are hearing.

Mr. Ross:

And that would affect the CRS system

Ms. Meehan

It May. the applicant would have to prove that the structure is still a contributing historic structure after this addition, otherwise, or they would have to elevate their home or remove portion of the structure itself from the main

Mr. Ross:

So we don't really know if there's a loss

Ms. Meehan:

That's correct, so though, so the hearing was put on hold and or continue so staff could do some more research on the CRS portion of this, as well as getting us more information from the from the applicant themselves during this period, there were a lot of questions. There were different exceptions within the floodplain ordinance and NFIP that allow certain exceptions for historic structures, if certain things are met. So the floodplain administrator at the time, Travis Henley, spoke with Eryn Futral, who is the North Carolina NFIP planner who worked with him to help guide him through our ordinance to make sure that those exceptions were not being met because of the mass, the size of the structure, how the the addition is being connected to the existing home, and it would still be considered contributing at the end. So it was determined that it would not, it could, may not be a contributing structure, and it still would be a substantial improvement, and would meet that threshold as a substantial improvement.

So the applicants put the hearing on hold, rather than withdrawing completely, but also went back to the drawing boards and decided to rework their project as it was, and reduce the cost so that it would be lower than the 50% threshold. The 50% threshold they went and got an appraisal and the market value of the home. And this is very important to remember, it's just the structure. This is not the property and the structure together. It's just the structure. It's what this substantial improvement amount is considered. So the value of the home, they said, was \$638,000 which, for 50% of that, was \$319,000 so the addition of this, for this home had to stay under that 319,000 square feet. The applicants submitted a estimate, cost estimate in February, and they were showing that that cost estimate was, I apologize, 228,000 approximately, what they were doing so they were working with the code officials, ensuring that, as they were going through the construction that the project was staying on budget and making sure they didn't cross this, this \$319,000 threshold, when the project was coming to completion, the applicant had to submit a final cost breakdown of all of the materials and labor and all of the different types of costs that are incorporated. And it came out that the addition came to a final cost of \$331,137.11

This time, the city kind of collected things, trying to see if there was anything that was added that could have been removed, trying to work with the applicant, because it was very close. But still it was over. So at that time, there was a courtesy notice of violation that was sent in June 28 of 2024 to the property owners, explaining that they had gone over the substantial improvement threshold and told them the avenues that they had taken to bring them into compliance. There was no action to remedy these violations. So a notice of hearing was sent to the applicants on August 27 of 2024 and the hearing was held on September 9 of 2024 allowing the applicants ability to submit evidence and arguments pertain to the violation. Upon the hearings found that it's still, there was no remedy still, and the structure was still considered a substantial improvement. So that is where we are now. They have appealed this decision of the floodplain administrator, and I would like to go through their, the applicants grounds for the appeal with you, the applicant states that the project is not a substantial improvement within the meeting of article five of the UDO. staff review notes, and this is on page 12 of your packet, if you would like to follow along, the cost of construction exceeds 50% of the market value of the structure before the start of construction Of the improvement and the start of construction is defined at the time of the issuance of the building permit. The approved 50% appraised value of the structure is \$319,000 again, February, the applicant states that they on an email to the building official, we are sensitive to the fact that we have a 319,000 improvement limit on the current permitting for the new construction. We previously committed that we will not exceed our maximum provided under the current permitting. The attached construction cost of the project were attached to the email totaling the \$228,015.16 at the Complete Completion of the projects, as we say, stated earlier as well, the applicant said their final construction cost in an email dated June 3, 2024 stating that the project had gone over budget due to inflation. The final construction cost, again, is \$331,137.11 the statement from the applicant to the building inspector in the email updated June 3, states

“just this year alone, according to the US Bureau of Labor Statistics, the purchasing value of \$319,000 has increased to \$326,073.73. Our approval is 319,000 authorized when the permit was issued. Our actual cost today is 331,137.11, or a 3.8% increase, in fact, since the time we first applied for a permit. The cost increased much more than we had ever anticipated one way, because. There in our overage is that prices at the minimum have increased 2.2% this year. So in reality, we miss our target by 1.6% obviously regret that, so reality, we didn't want to spend the additional money either, but by the time we realized the situation, it was far too late, too late to react.”

So at the request that the applicant staff reached out to Eryn Futral the NFIP planner for North Carolina and shared the email. And there is an email dated September 19 that this substantial damage and improvement regulations do not make any exceptions for this rule, the project's total cost is is considered for the 50% calculation at the time of construction. Therefore there are no references that if any inflation in any of the NFIP documentations from FEMA, all guidance, again, refers to the actual cost. So staff then determined that the project is a substantial improvement for that, as it states in the UDO, the second to ground for an appeal was that the project is a historical property that is exempt under section 5.20 E, 5b of the substantial improvement requirements set forth in article five of the UDO as I stated earlier, the structure is listed as a contributing structure in the city of Southport National Register of Historic Places. The new and existing structure must remain contributing to the national register to qualify for a variance from the elevation and flood proofing of historic structures. The project includes the demolition of an existing historic addition and construction of a new two story addition. The size and mass of the addition could prevent the structure from being considered a contributing

historic structure. Permit application for improvements, including additions or repairs of historic structures should be accompanied by two pieces of evidence. And this guidance is found in the NFIP guidance for substantial improvements and substantial damages desk reference, and it's FEMA publication 758, those pieces of evidence or documentation that confirms the structure is designated historic structure, a documentation that confirms that the proposed work would not preclude the structures continued designation as contributing there was no accompanying documentation to confirm either of these items at the time of application. So staff determined that, yes, this is a historic structure, but is not exempt from the substantial improvement requirements of the UDO.

That is the end of my report.

Mr. Masker:

So this variance dates back a ways.

Ms. Meehan:

I want to reiterate this is not a variance, this is an appeal.

Mr. Masker

But originally there was

Ms. Meehan

Yes there was

Mr. Masker:

And then it became an administrative matter versus variance request. Those approval was Administrative Approval Required for the issuance of a building permit

Ms. Meehan

They were going to meet the substantial that they were going to be below the threshold of the 50% substantial improvement. So, yes, that would be an Administrative Approval of their estimated costs for construction.

Mr. Masker:

So the permanent position, based on their representation that they would stay under that threshold.

Ms. Meehan

That's correct, yes, okay,

Mr. Robbins

Going through the numbers on this, so in February 28 2024. The projected cost for the projects \$228,000

Ms. Meehan

Correct

Mr. Robbins

And June of the same year. So four months later, it came in at 331?

Ms. Meehan

Correct

Mr. Robbins

So it was over 45% over. We're blaming that on inflation.

Ms. Meehan:

That's what the applicant has stated.

Mr. Robbins:

I think I'll have more questions for you later, Ms. Meehan, but not right now.

Mr. Masker:

There's specific language in there that is required to appear under the engineering and architectural certifications, and I haven't seen that on any of the drawings that I've looked at.

I know that. I know the drawings are stamped right, and perhaps some of the drawings have the stamp with the signed professionals signature over it, but I didn't see that certification.

[The Applicants attorney asks if VE zone applies here, which Ms. Meehan states is the same as a coastal A]

Mr. Masker:

What I understand is the signature certification has to appear on the drawings.

Ms. Meehan:

So for this, the portion of the home, that is that the addition is not within the coastal A section, so it meets the elevation of that as it's built, it would be the new home that is connected that had to be elevated to meet this V Zone verification.

At the pleasure of the board, the City of Southport Attorney, Brady Herman, is sworn in.

Mr. Herman:

Take me through the what's called the substantial improvement ordinance that the property owners are in violation of that's in Article 5 of the UDO, correct? Correct. And can you point to a section of the UDO that this is brought up and what it means for a substantial improvement? In other words, if I'm under this 50% threshold, what happens? And if I'm over the 50% threshold, what is my structure supposed to do, considering that it's in the Coastal A

Ms. Meehan:

It talks about additions or improvements to the pre-fire structure that the addition improvements in combination with any interior modifications the existing structure. The additions, it gives, what is an addition that would be considered an improvement, what is exempted and when, what needs to happen when it's done. So, if you do, if you go over and you meet the substantial improvement definition, which is over your 50% then all your whole structure must come up to this the standards of the most restriction, restricted zone that your home is located, which in this case is the coastal A zone.

Mr. Herman:

And we talked about how the building permit and all that was in January of 2023 correct, and at some point the applicant was aware of the substantial improvement section. Was that right? I mean, shortly after the building permit

Ms. Meehan:

Yes, that was considered with the applicant prior to coming forward for the variance, so they knew that they may go over that threshold just because of the size of the structure, and they also have to provide the cost of construction at the time of the building permit

Mr. Herman:

Okay, got it Yes. And so the purpose of you having those email exchanges which are in the agenda packet was really to show sort of the back and forth between the applicants questions at the time, it was Travis who was the flood plain administrator, as well as the state, which state Department was that?

Ms. Meehan:

Thank you. I'm sorry. I apologize.

Mr. Herman:

But anyway, it's Eryn Futral, are you guys past one playing ordinance? Because, let's be honest, this ordinance isn't extremely easy to go and sort of understand and comprehend, at least if we're not planners, that's kind of why I want to slow down here a little bit. so we have it from January to April, all these email exchanges, and just what's the summary of those emails? What ended up being sort of the path for the applicant was it to go down the exception route with the variance, that's option one or option two, proceeding with the addition, but being under the 50% market value of the structure being the substantial improvement would not apply.

Ms. Meehan:

The back and forth went forward that it may be a variance option would be some one that would be viable. That is why, then the application did go forward. But again, there were some discrepancies in the application, and then some information that wasn't quite coming together that the board wanted to get some more clarification on.

Mr. Herman:

And that's you're talking about, the variance application,

Ms. Meehan:

Correct

Mr. Herman:

And so, you know what, when they submit in the variance application is in the agenda packet. Is that right?

Mr. Meehan:

Correct

Mr. Herman:

And so what were they seeking a variance from? Is, is, is it this subsection B on substantial improvement, is that what they were seeking a variance from? I mean, I know

Ms. Meehan:

They were seeking a variance from the coastal A requirements.

Mr. Herman:

Gotcha, okay. And what's your understanding of why that was heard or probably open and it got put on hold, where the applicant, I guess, chose not for this former board because there's new board members, but the board of adjustment at the time is not going to render a decision. What was your understanding? Was the reasoning behind that?

Ms. Meehan:

That reasoning was behind the substantial improvement of a historic structure that we would may not be considered attributing and then, as mentioned with CRS score may go down, which is the community ratings system.

Mr. Herman:

Okay? So they were worried about the historic structure argument at the variance,

Ms. Meehan:

Correct

Mr. Herman:

And that's one of the arguments that that that the applicant has cited in their appeal statement. Is that? Right?

Ms. Meehan:

Yes,

Mr. Herman:

Okay, we'll, digest that here in a little bit on the historic structure argument. Okay, so take me through. You know, the variance was open. They decided not to go through with that. So what was the path forward, then, for them to go through the construction of the addition, but adhering to not going over this substantial improvement. Is that right?

Ms. Meehan:

Yes, they had to supply the city with a market rate appraisal of the structure itself, which they did provide in August of 2023 then they had to just ensure that all the construction costs were then modified to show that they would be below that 319,000 square foot okay, just back up.

Mr. Herman:

Were they aware that what would happen if they went over the 50% market value, if it was considered substantial improvement?

Ms. Meehan:

Yes.

Mr. Herman:

Were they aware and what would happen?

Ms. Meehan:

They would have to elevate the entire structure or bring the entire structure up to

compliance with the Coastal A standard, and that's what three feet above base flood elevation. Now that doesn't mean that the whole house would have had to go up that height. Just had to make sure that the elevation at the...

Mr. Herman:
Or they could go to tear it down, right?

Ms. Meehan:
Yes.

Mr. Herman:
Okay, yes. So take me through sort of the process here of identifying how they stay under that 50% market value. So the property owners went and got an appraisal. Is that right?

Ms. Meehan:
That's correct.

Mr. Herman:
And the appraisal is in our agenda package,

Ms. Meehan:
That's correct, yes.

Mr. Herman:
And the real estate appraiser, whoever did that, they valued infrastructure at 600 and something and change, yes, right?

Ms. Meehan:
Yes.

Mr. Herman:
50% of that gets to the 319 number,

Ms. Meehan:
Yes, right, that's correct.

Mr. Herman:
And the property owners were confident to adhere to that. Is that right?

Ms. Meehan:
That's correct.

Mr. Herman:
So when did they go and actually start the whole construction process that shortly after the variance, and then sort of getting the appraisal and all that.

Ms. Meehan:
Once they got the appraisal, it was in early 2024 that they came through and had all the materials and all of the construction costs added up and started their destruction.

Mr. Herman:

Okay, so they started construction, and they, I mean, is it? Is it common for them to have to go and check in the city and say, hey, here are my construction costs as I go?

Ms. Meehan:

Yes. So that was the February costs.

Mr. Herman:

Okay, if you wouldn't mind going to your argument section for the substantial

Ms. Meehan:

Yes, I'll go back.

Mr. Herman:

Okay, so we have there an email dated February 28, 2024 is that in the agenda packet?

Ms. Meehan:

Yes, okay.

Mr. Herman:

And this is the applicant, Robert Howard, emailing staff, giving them an update of where they are in the cost. Is that right?

Ms. Meehan:

That's correct.

Mr. Herman:

And I think you had on the other slide, but just for the Board's reference, there's an email and also associated costs with that email, dated February 28 2024 and the final value, or the amount of cost up to that point, was \$228,000 some change is that, was that correct now submitted by the applicant?

Ms. Meehan:

Yes.

Mr. Herman:

And did the applicant also say we previously committed that we would not exceed our maximum provided for under the current permitting?

Ms. Meehan:

Yes,

Mr. Herman:

So they said that. So they're saying we're going to go and stay under this 319,000 I mean, they're still at that 100,000 away, so

Ms. Meehan:

Yes.

Mr. Herman:

Okay, so you guys got the update, and then what happened after that?

Ms. Meehan:

The project came to conclusion in June, and the time they came in for their final inspections, prior to the CO they were they submitted their newest budget that shows them over the 319,000

Mr. Herman:

Okay, and that was, it's an email, and also an attachment. And I guess the email in early June, June 3, is that right?

Ms. Meehan:

That's Correct.

Mr. Herman:

And that email is also in the agenda packet as well

Ms. Meehan:

Yes

Mr. Herman:

And they attached, the total cost, is that right?

Ms. Meehan:

That's correct. And that was in the amount of 309 or \$331,137.11

Mr. Herman:

Okay. And then the property owner speaks to inflation, correct? as a reason why that cost went up. Is that right?

Ms. Meehan:

Yes.

Mr. Herman:

So after they submitted the cost, what happened at that point? Did the city go ahead and go through the notice of violation process under Article 5?

Ms. Meehan:

The city, there were, there were questions from the applicant, asking about inflation, what can be done? So the city wanted to work and see if there were any options available for some sort of inflation clause in the NFIP And spoke with Eryn Futral Again, asking her to look into any information that may be available, and she was she stated that and that it's really just the total costs, they're absolute numbers that are at the beginning of your construction.

Mr. Herman:

Yes. So did the applicant ask staff to go and ask Eryn Futral about this question about inflation and whether that is taking a consideration with the value or not.

Ms. Meehan:

They asked if there was, if there was a course of action, yes.

Mr. Herman:

Okay, so the property owner asked you to ask Eryn,

Ms. Meehan:

Yeah, as the floodplain administrator at the time

Mr. Herman:

and that was in September of 2024

Ms. Meehan:

Yes.

Mr. Herman:

And Eryn, Eryn Futral responded in an email, is that correct?

Ms. Meehan:

Yes,

Mr. Herman:

I'm just handing you. I've already given opposing counsel this email.

Mr. Coggins:

No objection.

Mr. Herman:

It's an email from Eryn, with some correspondence between, between, between you all. But I want to go ahead at this time and enter that email into the record, and I have as many copies as I could go and try to have for the board. But are you familiar with that document Mo?

Ms. Meehan:

Yes

Chair Haislip:

Did we have that in our package?

Mr. Herman:

No, that's why I'm handing it to you all now, entering it into the records.

Ms. Meehan:

May I make a point of clarification

Chair Haislip:

Please

Ms. Meehan:

Okay, The question that he asked about immediately after the calculation, we did speak with the applicant. Then the letter was sent, then in June, and that's when the applicant came back and asked us for this third

Mr. Herman:

Yeah, we'll get to that process. Fair enough. Let's stick on this one. So the applicant did

request you to go and ask Eryn about this investigation. What if, what was as the floodplain damaged person from the state? What was her? What did she say?

Ms. Meehan:

She said that regarding the information for substantial damage and improvement determinations, the question is more relevant to the permit application and permit issuance process. When an applicant completes the development permit application, providing the scope of development and work along with the associated cost estimate and that scope of development and or associated costs change, the applicant is responsible for informing the community of that change or becomes work outside the scope of the permit. Further the essential damage, essential improvement regulations don't make any exceptions in the rule. Rather, the total cost of the project is the basis for determining the 50% for that reason, you will not find allowance for inflation in the substantial improvement substantial disaster guidance. I suggest working with your town attorney and the primary process and requirements, the town staff has three documented the cautions of the project becoming a substantial improvement.

Mr. Herman:

Okay? So, according to Eryn, last sentence or two, is basically overriding the applicant's argument about inflation, right? Inflation should have gone. Is that correct?

Ms. Meehan:

Correct

Mr. Herman:

And that's why staff didn't go to overturn its decision when it issued its notice of violation, right?

Ms. Meehan:

Yes.

Mr. Herman:

And when was the notice of violation issued?

Ms. Meehan:

The notice of violation was sent, the original notice was in June of 2004, of the Yes, June 28 of 2024,

Mr. Herman:

And that started the notice of violation process, which, which has a lot of procedural requirements, is that? Right?

Ms. Meehan:

Yes

Mr. Herman:

More so than just like a typical you to go violation, where you get a notice of violation, you have a right to appeal. So can you just tell the board what the general process was and how the city followed that process up until now?

Ms. Meehan:

Yes. So there's the courtesy notice of violation and determination that is sent to the applicants with property owners that are in violation, and they are given a time frame that they have to bring the property into out the violation up to remedy the actions. If that is not taken, then it is up to the staff then to have a hearing, and then that's when the notice of hearing was sent to the property owners to allow them to come and speak with the floodplain administrative attorney to submit evidence arguments for their case.

Mr. Herman:

Okay, so the notice of violation date 2024, that's in the agenda package that right

Ms. Meehan:

Correct

Mr. Herman:

In fact, and this is kind of summarizing some of the stuff that you already went over. But it also attached some provisions on the appeal process. But it also attached, you know, the appraised value of the structure before the project, and it also attached the total cost that was submitted by the applicant in early June. Is that right?

Ms. Meehan:

Yes.

Mr. Herman:

And then subsequently, and according to the flood damage ordinance, there required a notice of hearing. That notice of hearing is like an administrative hearing. Is that right?

Ms. Meehan:

That's correct

Mr. Herman:

And they have an option. And they have an opportunity to go and present evidence at the hearing, just like they would right here.

Ms. Meehan:

Yes

Mr. Herman:

It's like a semi quasi-judicial if you will, correct.

Ms. Meehan:

Yes

Mr. Herman:

Okay. And so that notice of hearing letter was sent on August 27 2024

Ms. Meehan:

Yes

Mr. Herman:

Okay. And when did the hearing take place?

Ms. Meehan:
September 9, 2024

Mr. Herman:
And were the applicants, or, excuse me, the property owners at that hearing?

Ms. Meehan:
Yes.

Mr. Herman:
And whether the council, to the gentleman sitting next to me, were they at the, at that administrative hearing

Ms. Meehan:
They had council at the meeting

Mr. Herman:
Okay

Mr. Coggins:
I was not present.

Ms. Meehan:
Okay. I'm sorry, I thought...

Mr. Herman:
That wasn't supposed to be a trick question. To my knowledge, you were there.

Ms. Meehan:
You were there

Mr. Herman:
I was there via zoom, but I don't remember them in there, and they're allowed to have council, then they don't have to. Okay? And so what's the next step? So you have that hearing, and then what happens?

Ms. Meehan:
Then, once you have the hearing, you collect all of the evidence, then the corrective action is put together. That has also been what is presented to the applicants all along on how to remedy violation, and that is presented as a corrective action order that is signed by the floodplain administrator and submitted to the property owner.

Mr. Herman:
Okay, before we get into the order, let's go back to the hearing. Did the property owners have really any evidence or justification for why they were appealing, or having this administrative hearing, or at least tried to go and get it overturned to you at that point? Then, if you overturned, and you wouldn't have to,

Ms. Meehan
That's correct, they did. They submitted evidence and have continued the conclusions that they were act, they have again presented to us.

Mr. Herman:
It was the inflation art

Ms. Meehan:
That's correct

Mr. Herman:
For the substantial improvement they ever bring up the historic structure argument

Ms. Meehan:
Not that I'm aware of my head.

Mr. Herman:
Okay, all right, so based on the information from that hearing, you rendered a decision. You supplied an order, right? And that order was in the agenda packet, and it was submitted to them. Well, it was dated October 18. Is that right?

Ms. Meehan:
That's correct.

Mr. Herman:
And so obviously they have a right to appeal that that works. That's why we're here. But what do the property owners have to do to come into compliance and to determine if they were still in violation.

Ms. Meehan:
They must elevate the entire structure to meet the coastal A requirements and the for the property itself and or remove or detach the addition from the existing structure.

Mr. Herman:
And then subsequently after that, did they appeal that decision?

Ms. Meehan:
Yes, they did.

Mr. Herman:
Could you go to the support structure, because that was never brought up with the administrative hearing, but it was in the appeal statement

Ms. Meehan:
Yes

Mr. Herman:
By the applicants who are the property owners. Attorney, can you go to your argument section that's set forth for a bid from your staff report on the historic structure?

Ms. Meehan:
Yes.

Mr. Herman:

Okay, so take us through of why this project does not meet the exemption in 520 E 5 E

Ms. Meehan

So it does not meet the exemption because the project as a whole proves that has to prove that it will remain an existing historic structure, so that the removal of a historic addition, as well as proposing and including this addition the size and mass of it, potentially could prevent it to be considered a contributing structure.

Mr. Herman:

Okay.

Mr. Lemons:

That consideration is that based on their review of the project, or is it, or is it, also considering what your ruling is? I say that because your alternative is to raise a this thing 14 feet.

Ms. Meehan:

Correct

Mr. Lemons:

And this seems like that might get a little bit out of character for that area and historical value

Ms. Meehan:

Agreed.

Mr. Lemons:

So what? What conditions were they looking at when they made that ruling that it would not affect their historical

Ms. Meehan:

There was no, there was no background that would state that they were going to keep the historical district or the contributing to the nature of the property itself. So that was never considered, that was not brought up at the time of various the original variance, or at the time of the building permit itself. So they have the burden then to show that they will still remain contributing structure.

Mr. Robbins:

What entity makes that?

Ms. Meehan:

I'm sorry

Mr. Robbins:

What entity makes the determination of whether it continues?

Ms. Meehan:

That's the division of cultural resources. Cultural Resources, North Carolina.

Unknown:

State coast

Ms. Meehan:
Yes, state level.

Mr. Robbins:
And what's the process for that?

Ms. Meehan:
They would bring information to us that were or they would go directly to that agency and provide the documentation of what they were trying to they would like to the addition they're trying to build, and get their determination.

Mr. Robbins:
Is that typically done in advance of building?

Ms. Meehan:
If someone wants to use this clause and become exempt from having to meet the standards without having to raise all of the structure itself, then yes, that would happen prior to that.

Mr. Robbins:
Want to circle back to the raising the structure. It would have to meet the 14 foot line. That doesn't mean there's going to be 14 feet between the ground and the house.

Ms. Meehan:
That's correct.

Mr. Robbins:
That's how much would there need to be. You know,

Ms. Meehan:
I do not know, are we talking two to three feet? Six to ten feet?

Ms. Meehan:
I hate to speculate, really,

Mr. Eckert:
There is an elevation certificate. There is an EC. It states it's ten feet

Mr. Robbins:
So it's at 10 feet now?

Ms. Meehan:
Yeah, so that would be under five feet.

Chair Haislip:
More questions for Mo

Mr. Herman:
Yes, sir, I'm sorry. Some Section D that you have up there about what you have to go and show this sort of evidence of the keeping the contributing historic structure.

Ms. Meehan:

Yes,

Mr. Herman:

That's coming from some of this SI/SD Desk Reference.

Ms. Meehan:

It's substantial improvement and substantial damage handbook that is provided by FEMA to all floodplain administrators for us when there are storms or these types of projects come through, so we know exactly what to what costs are eligible or not eligible for the calculations gives a timeline of how things should happen, exceptions for the historic structures, where when those exceptions are triggered or not triggered, and when you should apply the substantial improvement to those structures. So that is where that Section D is coming directly from.

Mr. Herman:

I'd like to go ahead and enter in the record chapter 6, which deals with that subsection D, on when you need to go and have that piece of evidence, and what type of evidence to go and show we didn't make enough copies, but officially enter one in the record, and then you guys can pass that around. This comes from 6-24, right?

Ms. Meehan:

Yes. Page 6-24

Mr. Herman:

Was it any time the property owner or the applicant, for that matter, submit any evidence at any time regarding the historic structure to to be able to go and conform this section?

Ms. Meehan:

No

Mr. Herman:

And they didn't do it at the voting purpose stage, right?

Ms. Meehan:

Correct

Mr. Herman:

I may have a few more questions on redirect, but that's all the questions I have right now.

Chair Haislip:

Point of clarification for the new members, and I think Mr. Herman said it at the beginning that he does, he's a city attorney. He does represent the city. I don't want to clarify, does not represent this board, Ray is our attorney, so that, just so they understand.

Mr. Herman:

Appreciate that

Mr. Allen:

Just to make this clear, the \$228,000, that was an estimate, reconstruction estimate, there was some verbiage thrown around so much they had spent to that point, right?

Ms. Meehan:
Right. So let me clarify

Mr. Ross:
Did they not submit that with their building permit?

Ms. Meehan:
They did, but that believe that 228 was when that when they were getting some more of their materials in so that was kind of a midway,

Mr. Allen:
But that was that was submitted to the building, but was it submitted as cost to date or projected final cost,

Ms. Meehan:
Cost to date

Ms. Allen:
Okay. Was there ever a projected final cost, other than it'll be less than..

Mr. Ross:
No you're talking two different times.

Chair Haislip:
No, hold on. Let him go.

Ms. Meehan:
Well, I have not seen that

Mr. Allen:
Okay, because I was under the impression we first started talking, 228 was the initial estimate. But that's not the case. That's what had been expended since February.

Chair Haislip:
I want to recognize Rodney.

Mr. Ross:
I thought the 228 was the original estimate?

Ms. Meehan:
Yes, and they used that information at the time to get the building permit.

Mr. Allen:
Well, what I'm hearing now is that 228 is actually a interim, Here's how much we've spent today.

Mr. Ross:
They did not submit an ongoing cost update, and they started at 228 minus,

Ms. Meehan:

So if I may clarify in the email that was sent, this was the project cost as they were moving forward that

Mr. Allen:

so there is there was no specific pre construction estimate,

Ms. Meehan:

Not that I'm aware of. Spre-constructiono this is when they were working on their windows, and during construction,

Chair Haislip:

They may have it, but it's not in our information.

Mr. Allen:

I just want to make sure, because I've misunderstood what that 228 was

Mr. Masker:

There's an exhibit on it starts on just use the page numbering as a reference, tt's on page 123 of 239, it calls it 406 West Brunswick St New Addition BJ Gorman permitting limit 319, I didn't know what that document I didn't know that one and a half page document was an attachment to the building for an application.

Ms. Meehan:

This attachment is showing they are able to spend up to 319,000 to meet the 50% threshold. This was the document that was provided in February, outlining all of the cost they had taken improving that by the applicant. That's correct

Mr. Lemons:

With no dates. How are we supposed to be given this with no date on it

Mr. Masker:

They've got dates on the far left hand column, but yeah,

Ms. Meehan:

So the last date is 2-23 and it was attached to the February 28 email to the Building Inspector.

Mr. Robbins:

If I can ask this question, I think it would clarify. You agree with me that if you look at this document and you look at the next two pages, the line items correspond up to the February, 23 line, LYL& B, construction, \$14,279? So this does look like...

Ms. Meehan:

Correct. That's date. Yes

Mr. Robbins:

Who generated this?

Ms. Meehan:

The Applicant

Mr. Robbins:
Thank you.

Mr. Herman:
Yeah, for clarification, it's set up differently in the agenda packet, but there's the cost, and then there was emails that corresponded to those as attachments, so they're both in the packet, but they came via email or attachments of the cost, one in February and one in early June.

Mr. Lemons:
One more silly question. During this period of time, which pretty long, we've had a lot of staff turnover.

Ms. Meehan:
Yes Sir

Mr. Lemons:
It must have been very, very difficult to put your arms around and bring everything together and not miss facts and figures and things that were presented in feeling or even by powers to be above Southport. How do you think you did?

Ms. Meehan:
I think I did okay. I mean, with what I had to work with. I mean, we had all of the emails and information. Yes, I did get pulled in this is the late end of the game, and I was the third floodplain administrator to to be part of this. So yes

Mr. Herman:
So Mo, you're also the acting, I use the word planning director, but Director of Services, you're, you're the interim, then I am actually the and then now you are, but up until that period of time, I mean you, you're involved, it was just the assistant city manager who signed off on the first notice of violation letter, but you were have been involved in that whole process, and particularly when the assistant city manager left.

Ms. Meehan:
That's correct

Mr. Eckert
So we're looking at the cost of project. Beginning is where it's determined, but then at the end is what it's determined, the beginning of fair market value. Did the applicant have opportunity to provide a fair market value for the structure at the end of the project, relative to the cost?

Ms. Meehan:
It's it very specifically defines it that it's at the beginning of construction, which is at the time of the building permit.

Chair Haislip:
Any more for Mo now, because we'll get the applicants to come up if there's no more

Mr. Ross:
When did the building permit get issued

Ms. Meehan:
I don't have that date.

Mr. Ross
All right,

Chair Haislip:
The applicant, your representative. I guess I'll swear you in too.

Mr. Coggins:
Thank you, Mr. Chairman. My name is Steve Coggins, being sworn in. And if you wish, I have these three folks here that we did pass it all get sworn at the same time. Obviously the applicants, BJ, Gorman, Robert Howard, Jo Pat Hatem, and Ms. Spencer, all sworn same time, sir.

Chair Haislip:
Okay, that works. Does that work? Let's one by one. I'm sorry. I'm sorry, sir.

[Mr. Coggins is sworn in].

Mr. Coggins:
We are the appellants. We have the burden of proof. We're glad to finally have a chance to speak. We have to pass out to you if you do it, because we received the packet by email yesterday, for each of you, a if you would folder that contains our exhibits one through 23 it has some also added ventilations of your UDO floodplain ordinance, and also some cases that I'm going to talk about for your consideration here today. This is Jamie Fisher office with Rountree Losee, and again, I'm Stephen Coggins with Rountree Losee of Wilmington, and it's my honor to represent BJ Gorman, the owner of this property, to bring forth some new matters that they just simply were not in a position to be able to share earlier. We were able to do some further research and bring some further evidence, new matters that was not before the city staff, and good reasons were the appeal. As you know, Ms. Meehan makes an initial determination as to whether or not, for instance, this is a substantial improvement. And for the purposes of appeal, you in effect, stand in the shoes of Ms. Meehan, you can consider all the evidence as well for here today, as well as evidence that is already in your record. You can confirm in the park, reverse it and hold, remand out, but you're also positioned to act like you are in the office when the applicant comes in and to make your decision as to whether or not this is a project that complies with your UDO. Within the packet is our memorandum of laws. First thing that you will see that outlines what our positions are here, not necessarily in order which I'm going to bring to your attention. The first thing is what I want to do, and I will bring up a witness and talk about in a minute, this is, in fact, if this was a trial, that's what I call opening statement, okay. If we assume for a moment that substantial improvement rule applies, that this project had to come in under \$319,000.00, there is not one word in the ordinance or theme of regulations or guidelines that say whether or not you can or cannot make adjustments. That means there is an ambiguity in the case law stands for proposition that in order this board of adjustment to avoid injustice and undue hardship, especially as the evidence will show as a result of government mandates, that this board has every power make the adjustments. And we will show you the line item that when you

adjust certain things, not talking about inflation, certain line items that shouldn't be considered it greens, that it reduces its actual cost below that \$319,000 threshold. Secondly, we don't concede that we have to comply with the 50% rule, because if you take into consideration, it will be up, there's abundant evidence before you that this is, in fact, a federally designated historic structure, as well as one that's recognized as such by the Southport Historical Society. In other words, we meet every cynical criteria that makes this an historical structure, and if you combine that also with the evidence that was already in the record and the variance application, put those things together that the exemptions that we're talking about here do apply if there's not one word about how you go about establishing this particular language in here says that the confirms for closed work will not preclude the structures continue designation. Nothing says that you have to go to FEMA and they get a ruling on whether or not the structure will affect the continued designation. That is a judgment of the local community that submitted the application to the national register in the first place. And we have before you today abundant evidence, both on the historical designation and that this structure as it has now been completed, will do nothing, and in fact, that will show it enhances the likelihood because of the continued historical designation, because the front part of the house that faces the street was the latter part of the 1800s 1893. The back part the older part, 1877, while older, was fairly, what should we say, nondescript. This project, with that rear portion that was replaced, was so conscientiously designed and built so that elements of the beautiful historical features of the house faces there on West Brunswick are incorporated into the rear portion that's been added. In other words, it looks far more historical and it's far more in keeping with the entire neighborhood than the original structure was. And that is a determination that can be made in consultation with the members of this community, and with that evidence before you we would hold that we're exempt from the SIR rule in the first place and that the project should be approved. You're called affordable adjustment for a good reason. You're here to make adjustments in order to prevent absurd and unjust consequences, and we, as the people who are here appealing today, are asking for you now that we've had a chance to do our research in this admittedly complicated matter and various regulations so that you can in fact stand in the shoes of Ms. Meehan, armed with more facts, that was available to Ms. Meehan and issued the appropriate result. And so with that, what I'd like to do...

Mr. Allen:

so you talked about the historic that it precludes historic designation. Is this documentation? Is there any documentation?

Mr. Coggins:

There's going to be formal documentation presented to you in form of sworn testimony. In addition to the there's the official findings, placing this particular home in the national literature that establishes this historical designation

Mr. Allen:

Right, I'm aware of that. But the issue is after the work.

Mr. Coggins:

That's right. And so I'm here today to provide evidence of that documentation. Okay? So I would like to, I can at this time to call is BJ Gorman.

[BJ Gorman is sworn in]

Ms. Gorman, I take it you are the owner of and lived at 406 West Brunswick

Ms. Gorman:
Yes Sir

Mr. Coggins:
And you've lived there since about 1989

Ms. Gorman:
Yes, sir, I have

Mr. Coggins:
Would you please describe for the board very quickly what this residence was

Ms. Gorman:
We purchased it in 1988 for our permanent residence. My husband and I, We did some work on part of the house, because people that had lived there had basically not maintained the house. We spent most of our time working on the front house, which I call it, which is the 1893 house. That's where we spent our time and effort in redoing and trying to restore it. We lived in the back house during that period of time, and basically just lived in it. We put paint on the wall, but it was not in the same condition as the front house, and we knew that eventually we would get to that. But we never did. We moved in and like to scores. So it was actually a home, and we just tried to refurbish it to live into it

Mr. Coggins:
so visually and historically, how would you compare the back part to the front part?

Ms. Gorman:
The front part of the house appeared like the historic home. The rear portion, which was older, was a much more utilitarian pipe building. They had never, I think when they had done any work, they probably took the plaster off the walls, but it was like the old timey paneling in the house, there was virtually no insulation. If you've seen a lot of these old houses in town, you could realize that that happened a lot. The front house would be in good condition, but the back portion would not be and this was not

Mr. Coggins:
Nonetheless, it's all treated as one structure, and it has all been designated as a historic structure on our national historic registry. Is that correct?

Ms. Gorman:
Yes Sir, that is correct

Mr. Coggins:
And that was submitted that application originally by the Southport Historical Society. Is that correct?

Ms. Gorman:
Yes Sir

Mr. Coggins:
Who performed all research and satisfied the federal government that it meets that

appropriate criteria. Now, going forward, you have, when you were doing these improvements, okay, when you're planning on these improvements, it's now the subject of this hearing here today, you consulted with members of the Southport Historical Society. Have not correct, including Mary Poole, and who I understand is the clerk, the Secretary, I'm sorry.

Ms. Gorman:
Yes

Mr. Coggins:
And you have also consulted with the chair of the Southport Historical Commission, have you not?

Ms. Gorman:
The Preservation Commission

Mr. Coggins:
All, on the issue as to whether or not your proposed work, which could have any risk of precluding the structures continued designation, isn't that correct?

Ms. Gorman:
Yes Sir

Mr. Coggins:
And they told you what?

Ms. Gorman:
They told me that it would not affect it.

Mr. Coggins:
In fact, they told you that in some places it actually improved.

Ms. Gorman:
Both of them said, yes, it would actually because they had actually seen the construction that we've done and how we tried to match the back house with the front house, that had definitely improved it.

Mr. Coggins:
Now this particular the reason why we're here today.

Mr. Allen:
Mo, so does the Southport Historical Commission have anything to do with setting national register historic

Ms. Meehan:
They do not

Mr. Coggins:
But this is a person that has been enacted, though the chair of that commission has also been active in the Southport Historical Society, which was the applicant for the Federal historical designation, the first place Correct?

Ms. Gorman:
Right.

Mr. Coggins:
Now we are all here today because a certain part, as you face the house, on West Brunswick, as you look at it on the left, the most of the front porch and a small part of the inside of the of the den, which is the 1893 house, not the 1877 house that's in the rear where any of the works taken place, but because there's roughly 3% 2.5% of the entire structure is in that Coastal A zone, all, all of the Construction where the construction was to take place, including must comply with the Coastal A zones, right?

Ms. Gorman:
That's what we've been told

Mr. Coggins:
That's why we're here now.

Mr. Coggins:
You brought in a variance application first to deviate then from that requirement that if any part of the structure is in the coastal A zone, therefore coastal a requirements, have to apply for the entire work

Ms. Gorman:
Correct.

Mr. Coggins:
And there was concerns expressed in the hearing about whether or not that would affect the community rating

Ms. Gorman:
Yes

Mr. Coggins:
And that was then, in effect, put on hold and not revisit.

Ms. Gorman:
That's why, one of the reasons we decided to pull it, because of the comment that was made about that it would affect

Mr. Coggins:
Mrs. Gorman, did anyone look, [turn to our exhibit one,] which is the federal regulation regarding variances and exceptions in the very first two or three lines, did anyone bring your attention this language out of the federal regulation insurance premium rates are determined by statute according to actuary risk and will not be modified by the granting of a variance.

Ms. Gorman:
No Sir

Mr. Coggins:

Will not be modified by the granting of a variance. That was never brought by your attention

Ms. Gorman:
No Sir

Mr. Coggins:
Now let's talk then about the actual cost of the product project. As it turns out, there you were given a list items from the regulations and comments federal registry, various things that FEMA publishes about what items to be considered are items of cost and what are not correct. Now, as it turns out, there were some items of cost that you had to incur that was mandated by law. Is that correct?

Ms. Gorman:
The building inspector requested that we make a couple of changes.

Mr. Coggins:
The building inspector brought to your attention that you had to make some changes or upgrade the foundation to the addition beyond what was shown on the original plans in order to comply with code. Is that correct?

Ms. Gorman:
That's correct.

Mr. Coggins:
Specifically, additional rebar had to be put in. That Right?

Ms. Gorman:
Correct

Mr. Coggins:
Which required digging additional trenches and pouring more concrete. Is that right?

Ms. Gorman:
Right

Mr. Coggins:
Okay? And in addition, during the middle of the project, you had a contractor, I believe the electrician, walked off the job. Is that correct?

Ms. Gorman:
That is correct. He went to the building inspector and told him he was pulling his permit.

Mr. Coggins:
So he went and he pulled and he pulled his permit, and you had to get another electrician, if you would, to come do this work

Ms. Gorman:
Yes sir.

Mr. Coggins:

And you incurred an additional expense in order to assure that work that had been done was upgraded so that it complied with code as well as the future work that had to be done. Is that correct?

Ms. Gorman:
That is correct.

Mr. Coggins:
And then it comes to find out in your list of costs was disposal, that is garbage and landfill cost. And turns out that's a cost that should not have been factored in.

Ms. Gorman:
That's correct

Mr. Coggins:
But if you totaled up and you've received a letter from both your electrician and your general contractor on this rebar work that verifies what the circumstances were to live that increased cost mandated by law. Is that correct?

Ms. Gorman:
That's correct

Mr. Coggins:
Okay. And that also is in the record which you have submitted here today, all right? And if you total those up, it brings the total amount of the cost of this project is under \$319,000 does it not?

Ms. Gorman:
Yes sir it is. 318 something.

Mr. DiGuiseppe
Do you have documentation of that

Mr. Coggins:
We do as needed. In fact, I refer to you in our packet that's been handed out, I will refer you to exhibits 19,20,21 and 22. And I'm sorry, 23

Chair Haislip:
Can I ask a question? Was this the additional expenses you're alluding to is it was that after the 228 figure was arrived at, and this is after the fact

Mr. Coggins:
arrived at, can you address that?

Ms. Gorman:
I don't remember the dates, but was that prior? I mean, was the additional work not included in that 228, is that what you're saying?

Ms. Gorman:
It was included, I don't know if it was in that cut off. I'm not sure, I don't have, not sure if it was, if it was already

Mr. Allen:

Staff's package has the spreadsheet with the dates

Ms. Gorman:

The foundation would have been early but the electrical would have been toward the end, because we were through rough in and I believe right after rough in, we had to get the new electrician. So that would have been the killing portion. I'm not sure that it was that day,

Mr. Masker:

Ma'am, was this project competitively solicited? In other words, there's the general contractor who ended up doing the work, did he, Was he selected based on a competitive solicitation, or was the job basically negotiated with that GC.

Ms. Gorman:

We got, we got several bids, and most everything we did, we had it, Robert did extensive research to make sure that we got what we were paying for, but we got qualified people to do it.

Mr. Masker:

Okay. Second question, what was provided for the basis of bid? In other words, was there a complete set of architectural, structural, mechanical, safety, water, all that put together and said, Okay, I want you six people to bid this complete sealed set of drawings. I'm just curious. I that's important for me to understand how we arrive at these costs, because it's not just what you've incurred at the end, it's how you got in the beginning. Because that may have flushed, that may have flushed how much it's going to cost before you went started.

Ms. Gorman:

Well, if I might ask, would we have Robert because he's the one that really took care of the majority of that portion of it.

Mr. Coggins:

I'm happy the board is willing. I'm happy to bring you up also, Robert Howard, up to explain before she completes her testimony.

[Robert Howard is sworn in]

Mr. Masker:

And just trying to understand the basis of bid for the project in the first place. In other words, a lot of people have different approaches to the project. Sometimes they'll just bid the trades, but they'll go with the they'll negotiate the overall job of the GC, but don't competitively solicit maybe the electrical guy or the plumber, again, something like that

Mr. Howard:

Under the statutes, and under the codes BJ was the general contractor for this job as the property owner of that so we bid out individual components, like the plumbing, the electrical, the foundation plan, the siding, the construction of it. So we had multiple contractors throughout the job, and most of them we are in the property management business, and most of them are people that we use consistently.

Mr. Masker:
So you're acting as GC?

Mr. Howard:
Yes, sir

Mr. Masker:
So you've got a North Carolina contractors license?

Ms. Gorman:
No, i'm the property owner

Mr. Howard:
Well, I mean, the permit was issued to her.

Mr. Coggins:
Mr. Howard, while you're up here, as it turns out, that the additional cost that you incur in order that was not projected at all at the front end of this project, and you bid it out for the electricians and put it in the original estimate, because that contractor, the electrician, walked off the job, and you had to get a new permit. And then the new contractor came in and had to alter what was what was there in order to bring up the code and depleted that added your electrical cost, \$8,281 is that correct?

Mr. Howard:
That is correct.

Mr. Coggins:
And then, similarly, with respect to the work on the foundation that was imposed, the increase in cost by the city regarding the rebar that added \$3,500 worth of cost, is that correct?

Mr. Howard:
That is correct.

Mr. Coggins:
And actually, all of these was going over when we had the hearing before Maureen in the fire department, the attorney was there by my phone, and I had my talking points, and they and I left a copy of the talking points for them, but we went completely over the reason, the three reasons that that we had exceeded the budget

Mr. Coggins:
And then, in addition that, then, under the FEMA guidelines, there was a final accounting of where there was garbage, landfill, cost of \$481 it should not have been included.

Mr. Howard:
Correct. That is correct.

Mr. Coggins:
So if you then adjust those and withdraw those added costs that we talking about. That comes to a grand total of \$318,874.95 which is less than \$319,000. Is that correct?

Mr. Howard:

That is correct. And the foundation, if I could say that the when, when the plans were submitted to the city and and they gave us the permit for the the construction part of it, and approved those initiative permit. Then when they when Donnie Price started digging the foundation, Kylie Barefoot visited the site and contacted me, actually, and said that he would like to have some great beams put in, and he would like to have threaded rod from the floor to the ceiling, which I did not object to, but that's what added \$3,500 the cost and this was after the permit had been issued. And after the, you know, 319,000

Mr. Coggins:

And the electrical increase cost happened after the permit was issued

Mr. Howard:

We had a contract for 16,135.00 and we spent an additional it came out to an excess of \$8,000 as a result of having to change contractors.

Mr. Coggins:

And similarly, the garbage landfill cost of \$481 was after the permit was issued. Right?

Mr. Howard:

That's right.

Mr. Allen:

Did you have an estimate, a full estimate, a pre-constructiona estimate. Did you add up all the trades, and how much was that?

Mr. Howard:

We did. John, I wish I could tell you, but it was like \$309,000 that we had. The 224 that keeps getting mentioned that was (Unable to distinguish)

Mr. Allen:

Did you have a contingency fund in the 309?

Mr. Howard:

Well, we knew we were going to be tight because it was 319,000 and we were following it, you know, as closely as we could on a day to day basis. So the contingency was the difference between the like the 309,000 and the 319,000

Chair Haislip:

Questions of Mr. Howard?

Mr. Herman:

Assuming everything that your attorney saying is true in terms of those costs don't count. Why is this now just being brought up today? In other words, the point of this board is to step in the shoes of the floodplain administrator, which that decision was made back in June of 2024, so why are we waiting all the way until July or January of 2025, for that information to come out, even assuming if that's if that's true?

Mr. Howard:

Can I respond now?

Mr. Herman:

Yeah, that's a question. Yes, sir. Okay. Thank you. That, these three, these were brought up when we appeared for the hearing, for to try to get some some assistance in that in, yeah, during that September here at the fire department. Okay, I believe you were on Zoom.

Mr. Herman:

Yes, I was. Okay, and I guess Help me, help the board understand why those are not applicable, why those costs all of a sudden lower it from, you know, 330

Mr. Howard:

Because that's what we were explaining. We lost our electrician and that added the additional cost to get an additional contract, electrical contractor, the addition for the building inspector was at that meeting, as you know, at the rescue squad building right and and he did not object to this, that after the permit was issued, he required us to change the foundation plan, which added to \$3,500 to it that was discussed at that hearing as well. We've tried to explain this to the town.

Mr. Herman:

Sure, sure. Honestly, these are just clarify, clarifying questions. So I guess your initial contractors are up to the work. They didn't do a good enough job again to go back and get it redone again.

Mr. Howard:

No, sir, that's not what that's not what we said. What happened was, and there's emails to document this.

Mr. Herman:

Where are those emails?

Mr. Howard:

I think they're in your package. But the electrician did, without telling us, went to Mr. Barefoot, who was the code enforcement officer, and said, I'm going to pull my permit for this job, and I can't complete it. Then he pulled off. So Kylie emailed me and told me that that he had withdrawn his permit, and we had to get another licensed electrician on the job before we could proceed. We did that immediately, and the new electrical contractor had to go get a permit from the City of Southport which he did the only way he could do that in the time frame, because all construction was going, all the subs were there, is on an hourly basis. And we paid him on an hourly basis, three upon hourly rate. And that the difference, we have a 16,135 contract, which was gotten us into the 319 range. Under 319. We had paid him \$10,000 of that amount of money. Then if we paid the difference between that, if what we paid the new electrical contractor, and it was we had spent \$8,000 more than overage, which cost was 24,000 instead of 16,000 to get that job done. And that was all explained during that meeting.

Mr. Herman:

No, still cost that was associated the addition

Ms. Gorman:

Oh, it was, but it was cost that was not anticipated.

Mr. Coggins:

I But mandated by law, but mandated by law. Directing your attention to the definition of historic structure here in Southport, it provides three ways to get that designation. Does it not? First to be designated by the Secretary of Interior, which, as appears in the packet before now board in the bar exhibits that would be exhibits for exhibit 14, but it's also been identified as contributing to historical significance of the historic district designated by the community with a certified local government program that is the historic South Historical Society.

Mr. Howard:

Correct Southport Historical Society

Ms. Meehan:

No it's not

Mr. Coggins:

And they were the actual applicant and submitted their research as part of the Federal Application. Is that correct?

Mr. Howard:

That's my understanding.

Mr. Coggins:

Is it individually listed on a local inventory to start landmarks and communities with the certified local government program?

Mr. Howard:

It is

Ms. Meehan:

The certified, we are not a certified local government. There are very specific applications and resources you have to go through. So that is not certified as contributing designated by a certified local government program.

Mr. Coggins:

But there's no dispute that it is, However, been designated by the Secretary of Interior.

Ms. Meehan:

I don't disagree with that.

Mr. Robbins:

I have a question at that point, is this house itself designated as a historic property, or is it on the list of contributing properties to the historic district or both?

Mr. Coggins:

Yes and yes, it's mentioned at least three separate times on the list

Mr. Robbins:

That doesn't, I didn't get an answer to my question. Is on the list

Mr. Coggins:
Yes

Mr. Robbins:
The building itself is not listed as a historic whatever by the Secretary of Interior?

Mr. Coggins:
Well, it's mentioned at least three separate times.

Mr. Robbins:
I hear you on that. I'm trying to get an answer to the question. We're talking about the building itself being historic? Are we talking about it contributing to the historic district?

Ms. Gorman:
The house itself is

Mr. Robbins:
From the Historical Society. Is there one from the federal government?

Unknown person:
No

Mr. Robbins:
Okay, thank you.

Ms. Gorman:
But it's registered with the Government, from my understanding

Mr. Robbins:
There's a important difference there that may have a factor in this statute. I'm certainly not wanting to say whether it does, but it's a question that it's going to keep coming up?

Mr. Coggins:
Well, it is at least identified the quote regulation as by the secretary of interior of this document as contributing to the historic significance of a richer Historic District. Is it not.

Mr. Allen:
And do we have anything from the Secretary of the Interior, as far as documentation confirms the work will not preclude structures continue [unknown],

Mr. Coggins:
No. And the fact that matter is, is not one regulation of guidance about how that has been done. That factor I submit to you during the everyday world of building permits and historic districts that obtaining from the federal government a confirmation that it will not preclude the structures continued designation. There is no provision for such and that that is that is something which the administrator is capable of making determination even by consulting with this local author.

Mr. Allen:
I don't think that's correct

Mr. Coggins:
But if one could point to me a particular specific on that

Mr. Allen:
Mo, How many individual structures in Southport are on the National Register for historic

Ms. Meehan:
There are a couple hundred, I don't know the exact number.

Mr. Allen:
No, the structures themselves

Ms. Meehan:
Yes, yes, there are several 100 structures not contributing, but in the inventory for the National Register

Mr. Coggins:
My understanding that this one is

Mr. Allen:
There are like two or three half dozen buildings that are on the National Register

Ms. Meehan:
As landmarks, yes, so This, that is a completely different contributing so everything else is part of the National Register district. Not all of them are contributing. Okay, they can be part of the registered district and not be contributing.

Mr. Robbins:
Well, I'll go ahead and state my underlying question. And really is, Trying to drill down on this is, does change to a structure affect the status of whether or not it contributes, and who makes that determination?

Ms. Meehan:
Yes, it does. And the state, we have, the city has to prepare an inventory and show the distinctions of each of these properties, and show what may or may not be considered contributing any further. And then we send that to the state historic resources. And they, I mean, we're in the process of that. That's for the national register that goes to the federal government, but they did review that. The state did review that, and they have that on file as our register.

Mr. Robbins:
So when changes happen to a building that gets factored in

Ms. Meehan
It when there is a new inventory. So right now we are in the city is in the process of doing a new inventory and local designation report for the local historic district, which is completely separate from the National Register district. So some of these things may change once we have to go through all of the lists.

Mr. Robbins:
What has bearing on section 520 E 5 B

Mr. Meehan:

So the project historical is the contributing structure of the national register of the Historic Places. Yes, that it must remain existing and contributing to the national registers the 7b or the 5b I apologize

Mr. Robbins:

So if this House continues to be contributing, as determined by whom

Ms. Meehan:

By the state they would have, we'd have to have information I would put together for register [mixes into Mr. Robbins]
cultural resources We'll have to make that determination. And has that come up anywhere with anybody?

Ms. Meehan:

No

Mr. Robbins:

Anything else, as far as the impact of amending the structure, changing the structure that we have bearing in this way that you can think of?

Ms. Meehan:

The historical property, one of the other exemptions would be, if you change the face of the wall that you're attaching the addition to, if you restructure the wall itself, then that will preclude it from being considered historical. If they had just used a simple doorway that had been existing and added to it, then it would be, it could, could have been considered exempt.

Mr. Robbins:

What is the case here?

Ms. Meehan:

They changed the whole structure of the rear wall.

Mr. Robbins:

I'm hearing something different, seeing a negative from the applicant...

Mr. Howard:

The only thing we did was take the siding off and put sheet rock. The wall is exactly the same.

Ms. Gorman:

There was a doorway, like a doorway with two side panels on the back of the front house that went into the kitchen. And that still remains

Mr. Ross:

You would have had to tie into the structure. You tied in the structure of the second building?

Mr. Howard:

We attached right to it, yes, sir

Ms. Gorman:

Almost to the outline of where the old building was,

Mr. Lemons:

So kind of goes back to my other so your requirements is for them to raise the house,

Ms. Meehan:

Correct

Mr. Lemons:

Wouldn't that greatly change the front and so all that we're hearing about it being on the list or whatever? Wouldn't that be destroyed?

Ms. Meehan:

May or may not. It depends on how much it has to be raised.

Mr. Lemons:

We determined five feet

Mr. Howard:

Elevation says we are at 11 feet. We meet the federal standard. We meet the federal standard. It's the three free board we don't meet. So as far as we were just applying for federal if we would be okay. It's just the city's extra three foot.

Mr. Ross:

Is that the CRS.

Ms. Meehan:

That's correct. That's right.

Mr. Howard:

And we take exception to that. We don't think it does.

Mr. Ross:

CRS would be effected, correct?

Ms. Meehan:

If the free board is not yes, because that is part of our ordinance, yes,

Chair Haislip:

You went above and beyond.

Ms. Meehan:

That's correct

Chair Haislip:

But, that's what gives you the extra points. Correct?

Ms. Meehan:

Correct

Chair Haislip:

We're approaching the time. We probably want to need a break. Can we take 10 minutes?

[Break]

Mr. Chairman, as a matter of housekeeping. As a matter of housekeeping, I failed to move to admit our exhibits one through 23 discussing, testify to you. I moved to admit our exhibits one through 23 Okay.

Chair Haislip:

Before we proceed with anything else, based on some questions that have come up and points of law that we need to potentially discuss. Believe we need to go into an executive session with board attorney. We move to go into Executive Session for legal reasons for about five minutes.

Motion made Mr. Robbins, Seconded by Mr. Allen - All in favor. Signify by saying, aye. All Ayes

[Closed Session]

Chair Haislip:

What we discussed in executive session is the fact of we've got a lot of information that we've ever had, received tonight, and I think we've been representing, referencing these things throughout his presentation, and I think it's gotten to the point where our attorneys and I think we agree that we need time to look at the points that you brought up from a legal perspective to see how they would impact us moving forward in this decision. I think what we're saying is from ballot points were raised by people's testimony and that we need the time to go back and look at the legal stuff to make sure so, we were not going to take a vote tonight.

Mr. Lemons:

Yes, we have not said that, we have not voted that.

Chair Haislip:

Okay. What we would like, though, is, if y'all have any more information as you to add to this, your rest of your you have a rest of a presentation that you feel like would benefit us, something different that hadn't been said. We definitely want to provide that opportunity now to get that out, since everybody's here.

Mr. Coggins:

I did have some very short, narrow evidence to make sure that I'm in record. And I'm not sure I don't have a problem with any more time to digest, but I'm assuming that in any proceedings that the attorneys would have the ability, once you got a chance to digest it, that we would be given the opportunity to argue our points before decisions. You know what? You would come back? I suppose.

Chair Haislip:

Yes, we will come back.

Mr. Coggins:
No, no, we could do a closing statement.

Chair Haislip:
It's going to be a continuation, right? This will be a continuation. I mean, again, we just got this tonight. Yes, we should have had this two weeks is our thing

Mr. Coggins:
Well we didn't get our packet until yesterday?

Chair Haislip:
I understand, but it's a lot of stuff to take into consideration.

Mr. Herman:
So, I mean, I agree it's up to you all if you want to continue it. I guess the path is, do we go and still present some of the more stuff that I want to go and present as well as you, or we stop it now and then go.

Mr. DiGuiseppe:
I mean, that's, I think, I think the thing to do would be to finish out evidentiary proceed. Evidentiary being presented, any evidence you want to add that hasn't been presented already, you can put that into the record and then, I mean, you could have a short formation, but at the next meeting, and actually going to be decided upon to do it,

Mr. Herman:
Sure, so we can have, like, a clip on all I'm saying is, too is I have a couple more points I want to go in.

Chair Haislip:
By all means. I know that's what we want to provide opportunity for both sides to present.

Mr. Coggins:
But, and I did want to ask Ms. Meehan a couple questions. Okay? Because, you know, but there are two people that one's in the hospital, who was our consultant, planner, okay, that I would want him to address the issues of what we're talking about, these required changes in the middle of the project, and whether or not this would, in fact, have an effect on our rating, that would be roughly two minutes of testimony. There's also the chair of the Southport Historical Commission who is available by phone and can testify by phone under oath, but if you continue to date that, then that testimony would be 60 seconds and so, but we at least could have a physical presence here and shorten that short now, a CRS.

Chair Haislip:
The CRS is a sticking point with us, but it's been we would probably welcome someone to share their at least their interpretation, if you could then allow us then to bring those two witnesses, I can't help you, to the hospital. They went in the hospital yesterday. And the chair of our state, I'm sorry, the Southport Historical Commission, okay, which is specifically referenced in the online citation. I believe a memorandum could be physical available there, but it is available now by phone under the under oath.

Mr. Robbins:

If I may. I don't think there's any intent to limit presentations next time you do want to hear anything that you feel is important to get on the out, aired out right now.

Mr. Coggins:

I neglected the most important thing. Thank you for your diligence in your care and thoroughness. Thank you very much. Say that sincerely on behalf of BJ and Robert, and with that, then I'd like then to I can just to complete a short item of testimony by Ms Gorman and then just a few questions for Ms. Meehan. Ms. Gorman in the packet before the board, here are some photographs taken, particularly exhibit 16, taken from the front porch. That's the part that's closest to the marine, basin waters, correct? And as I understand, your experience, even during the high point of hurricane Florence agreed, how hard was the hurricane Isaias, that the waters never crossed the road at that point. So yes, that's in the coastal A zone. You're not aware of any flood waters ever having reached the actual 1893 section of this structure. Is that correct?

Ms. Gorman:

That's correct.

Mr. Coggins:

Now, as fate would have it, though, if the big blow came and destroyed the 1893 house, so that only thing that was left was the 1890s house, I'm sorry, I'm sorry, 1873 new addition, that which you have constructed incorporates the historical elements more than the original home there in the rear, so that what was there would be more in keeping with the neighborhood

Ms. Gorman:

That is correct

Mr. Herman:

I guess I'll reserve the rest of my questions Ms. Gorman and Mr. Howard for the next meeting.

[Jo Pat Hatem is sworn in]

Mr. Coggins:

Dr. Hatem, you formerly served as the Mayor of the City of Southport. Is that correct?

Dr. Hatem:

Correct

Mr. Coggins:

And during that time period, the efforts got underway, but you were well aware then of the efforts of the Southport Historical Society to obtain the historical designation that's part of the evidence now, before this board, that is, exhibit 14

Dr. Hatem:

Correct, yes,

Mr. Coggins:

And you are familiar with the structures of which Ms. Gorman and Robert Howard live. Is that correct?

Dr. Hatem:
I am

Mr. Coggins:
And afterwards, you were involved in the process of the ordinance changes to establish the Southport Historical Commission. Is that correct?

Dr. Hatem:
Correct

Mr. Coggins:
All right, now, are you aware of anything of this work that in your dealings, and of course, terms of your mayor, you dealt with folks at FEMA? Correct?

Dr. Hatem:
Correct

Mr. Coggins:
The National Flood Insurance Program.

Dr. Hatem:
Yes

Mr. Coggins:
Are you aware of anything about this? About this structure? Is this that would preclude the structures continued designation as an historic structure?

Dr. Hatem:
No, in fact, I think it enhanced the historic structure and it enhanced the historic aspect of the neighborhood.

Mr. Coggins:
Thank you. I have just a handful of questions that I can for Ms. Meehan. Just continue to sit right there, as I understand it. If you look at, I think this is in the packet package you've got just about the entire I think UDO flood ordinance with it

Ms. Meehan:
Yes, sir

Mr. Coggins:
And I'll direct your attention if I can to 5.15, D, C, and I believe 5.15 D, C it talks about you making the determination as the administrator as to whether or not the project would be a substantial improvement.
Is that correct?

[Discussion over the correct page]

Mr. Coggins:
We got the D. D, I'm sorry, D is in Delta, C, as in Charlie. Okay, so determinations for existing structure, right? Then you go to C, right, and that is on page 519, correct. That's

correct. Okay, the bottom of that, okay. And it says that your, your your responsibility as the administrator.

Mr. Lemons:

Let us get with you. Where are you?

Ms. Meehan:

Yes, sir, is page five, okay, on your in your packet. Would you like that number? Is page 161, of your packet. And it's D letter C,

Mr. Coggins:

And would you simply read that into your record?

Ms. Meehan:

Yes, determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage.

Mr. Coggins:

Okay, and so you can determine, then at the administrative level, when the applicant comes in, is to make a determination as to whether or not it is a substantial improvement. Correct?

Ms. Meehan:

That's correct.

Mr. Coggins:

And I believe you have the definition of substantial improvement blown up there again on the PowerPoint overhead. Is possible for us to be able to bring that up?

Ms. Meehan:

Yes.

Mr. Coggins:

And so when the applicant comes in, you, you're the person who makes the determination right from the get go, is the weather or not the cost would equal exceed 50% correct?

Ms. Meehan:

Yes, sir.

Mr. Coggins:

And you make a determination as to whether or not any alteration of the historic structure, provided that the alteration will not preclude structures continued designation as a historic structure. Isn't that correct? Did you, but you didn't make a determination about whether or not the alteration would preclude structures continued designation. Is that correct?

Ms. Meehan:

That's correct.

Mr. Masker:

So, it's either A or B. It's either, right

Mr. Coggins:

Provided and that the alteration is approved by variance issued pursuant to section 5.18, correct.

Ms. Meehan:

That's correct. So it has to meet, prove that has to be proved that it will continue as a contributing structure and be approved by variance.

Mr. Coggins:

So you have to make that determination right from the get go as the as the administrator and a building permit was issued on to build this project

Ms. Meehan:

After the applicant agreed that they would not meet the threshold for substantial improvement.

Mr. Coggins:

I'm saying though there was an initial determination, though, where a building permit wasn't an issue

Ms. Meehan:

No, sir, only one permit was issued

Mr. Coggins:

Well, to that point, we go to the order for corrective actions I believe, that would be our exhibit 11

Chair Haislip:

Which one are you looking at, sir,

Mr. Coggins

Exhibit 11. Okay. If you go to the second page, I believe, is under findings of fact, okay, and if you go to sub paragraph four there, yes, and it says the owner submitted a building permit for a single family home on subject property on April 4, 2024, I was hoping you might be able to help me on this me hand, I've not been able to find in the packet or in any of our documents, a building permit was dated April 4, 2024.

Ms. Meehan:

That, that was an incorrect date

Mr. Coggins:

Can you tell me? Then what would be?

Ms. Meehan:

That would be the January, the original January date that they applied one moment, January 9. So this should say January 9 of 2023

Mr. Coggins:

January Yes, 2023 okay, and that was a building permit. Was that based on there being a substantial improvement?

Ms. Meehan:

No, that was the initial building permit that they they applied for before any determinations were made.

Mr. Coggins:

Okay, did you at any time make a determination as to whether or not what they were trying to do was a substantial improvement?

Ms. Meehan:

It was determined that it may and that they had to provide a detailed list of construction costs.

Mr. Coggins:

Did at any time, did you advise the applicant as to what is the procedure to go to determine whether or not their alteration was going to not preclude the structures continued designation as a historic structure?

Ms. Meehan:

I was not included in any of those conversations.

Mr. Coggins:

Are you aware of anybody telling Ms. Gorman or Mr. Howard has to be done? Are you aware of any specific provision anywhere, whether it's the FEMA regulations or in their published guidelines that says, This is how you go about establishing that an alteration will preclude a structures continue designation, anywhere?

Ms. Meehan:

It becomes the burden in the in the packet that we gave from the SI/SD,

Mr. Coggins:

I'm saying I looked through that and I didn't say anything that said words to the effect of, this is what you do. You identify the local the applicable FEMA office, you send to them to this application, you ask for us whether or not this will preclude the continued status or do you ask the local historic Commission, or do you ask the local historic society, or whatever you know of anything that says this is how you do it? ABC, one foot in front of the other.

Ms. Meehan:

No.

Mr. Coggins:

Now, in our respect, are you aware of anything that says that you can't consider changes mandated by law once the project gets underway, as to whether or not that should be included into the cost of project or not.

Ms. Meehan:

It just states that total construction cost,

Mr. Coggins:

Total construction costs. And there is no definition of the word total construction cost.

Ms. Meehan:

No, but there is a list of what is and what can and should be excluded in those calculations.

Mr. Coggins:

Now let's suppose for a moment that the project is 95% done, and a fire happens and the whole thing burns down. And suppose further there's no fire insurance or anything like that, and the applicant goes through and cleans it up, rebuilds it again. Is there any word that you know of any regulations that say that gives that says this board right here does not have the power to take into consideration that circumstance?

Ms. Meehan:

No Sir.

Mr. Coggins:

Nothing that says that they can but nothing that says that they can't.

Ms. Meehan:

Correct.

Ms. Coggins:

Now, are you familiar with that there's are you, as far as I will represent you that I'm not able to find a single case in the land that applies this particular ordinance that we're talking about here. Okay, so I'm not surprised that you've not heard it. I've tried to find such case. If those cases said yay or nay, Lord knows, I would provide it. But I'm assuming you haven't seen such cases.

Ms. Meehan:

No sir

Mr. Coggins:

In that vein, are you familiar, though, in some cases, that proposition that when it comes to the community rating system, that a variance alone cannot result in that community rating system change, that rather, it must be a pattern of ignoring the standards that are set forth in the NFIP regulations. Are you familiar with that

Ms. Meehan:

No

Mr. Coggins:

So and I'll represent an opportunity to consideration during their delay, I submitted to you at least three cases in other jurisdictions that talk about in these instances, there has to be an established pattern, and in fact, that's quoting language from the regulations before you can put the community rating somewhat at risk. Now let me ask you about the community rating system. As I understand, what you explained earlier is that from time to time, the rating system was revisited the applicable officials from the state, I guess the federal government will come down and check and see how Southport is doing.

Ms. Meehan:

Yes

Mr. Coggins:

When is there supposed to do about how often there are two different cycles?

Ms. Meehan:

There's a every five year, and then there is an annual checkup on everything.

Mr. Coggins:

How is the annual differ from the five year, it is not as thorough.

Mr. Coggins:

When was the last annual?

Ms. Meehan:

The last annual one was in 22

Mr. Coggins:

so, they're running a little behind

Ms. Meehan:

Yeah, I guess.

Mr. Coggins:

And when is the five? Next five year was supposed to take place?

Ms. Meehan:

28 I believe.

Mr. Coggins:

And 28, three more years? Okay, so somebody's going to, they are late to show up for the annual. And what kind of things we look into during the annual?

Ms. Meehan:

They look at every different section of the CRS to ensure that we are meeting one a threshold that takes us into their different levels of the discounts that you do have to meet certain thresholds, and they determine that one, we are still meeting those thresholds. And two, there are different sections throughout all of the different sections that we can prove different points for each activity that the city takes

Mr. Coggins:

In this annual review that you tell me about, where these thresholds are met and whatnot, for this point system, are variances a part of that faculty to look at on these annual reviews?

Ms. Meehan:

To be honest, not on the annual one. They they don't ask about the variances on the annual, but they will at the five year,

Mr. Coggins:

At the five year, and that's the one that's coming up in 28

Ms. Meehan:

Yes, I believe

Mr. Coggins:

How many variances do you know of exist in the City of Southport from the UDO flood limits,

Ms. Meehan:

Zero

Mr. Coggins:

So if you continue with this president, let's assume, hypothetically, for some reason, this appeal is deemed to be a variance or whatnot. Are you familiar of any instance ever where it varies for one property resulting in a negative, adverse rating of a community system

Ms. Meehan:

Not that I'm aware of

Mr. Coggins:

Now, as I understand it, right now, you're the grade for, if you would, under the point system for the city, is seven. Is that right?

Ms. Meehan:

Yes

Mr. Coggins:

And tell me if it gets worse. Is it six or is it eight? Which one's better?

Ms. Meehan:

Six is better.

Mr. Coggins:

Six is better. Okay, so, as I understand it, the number of CRS points to get you to grade seven is 1500 to 1999 is that right?

Ms. Meehan:

I don't have those numbers off the top of my head.

Mr. Coggins:

Okay. So do you know how many... How many points we were awarded? Five, I guess that determine was made every five years. Was that back in 23 last year, when we get in the grade,

Ms. Meehan:

We got the grade in 23 it started in 22

Mr. Coggins:

Okay. What was our point? How many points did you get?

Ms. Meehan:

Again, I don't remember the point level that we've received, but we were within the threshold. Just remain seven

Mr. Coggins:
Somewhere between 1500 and 1999

Ms. Meehan:
Yes, That's correct?

Mr. Coggins:
Okay, and are you familiar, let's suppose when the time comes for the review in 28 in 2028, let's say you have one this order on record, or one variance and whatnot. You have any idea how many points that would be?

Ms. Meehan:
No, I would have to consult with my FEMA representative.

Mr. Coggins:
Okay, so truth is that we talk about a potential risk, but really, you really don't know how to quantify that risk. Is that right? In other words, you really don't know whether or not if this board granted a relief to miss Gorman, you have no clue really whether or not that would affect the reigning duty.

Ms. Meehan:
I do not

Mr. Coggins:
Do you dispute that the James Pierce residents is recognized in the federal and the Federal National Register as being of historical significance, contributing to historic significance of the city of Southport.

Ms. Meehan:
I agree with that.

Mr. Coggins:
You agree that that does

Ms. Meehan:
Yes, it does

Mr. Coggins:
You noted certain things on the improvements of the addition that incorporate features of the part of the house at fronts West Brunswick, did you note those

Ms. Meehan:
I did not.

Mr. Coggins:
Okay, may I ask Ms. Gorman, so Miss Gorman, would you rise just for a moment, and from there, would you please tell them? And I'd like to ask you this, the things that you did, you talked about how you discussed the changes we made to this edition, and that you consulted with members of the Southport Historical Society on that point, and based on that please tell precisely this board the changes that you incorporated to design that addition so that it would continue its characters in the Start structure and continue to

contribute to the City of Southports Historic District designation.

Ms. Gorman:

Well, we basically followed the design of the front house. The front house has a number of features that are obviously street such as brackets under the eaves. There's a wrap around banding around the top edge. The windows have Southport bows, and we included all of those in the back. The detail on the front porch, on railing the banisters, we duplicated that the back porch for the upstairs and downstairs. So any of those details that made it stand out and look historic, we did to make the back house look the same

Mr. Coggins:

And those are all features, Those were not there originally

Ms. Gorman:

Correct

Mr. Coggins:

The various factors that you talked about in terms that could affect adversely, a structures designation, I think you may have mentioned size and what were some of the others,

Ms. Meehan:

Mass

Mr. Coggins:

Mass. Is that right?

Ms. Meehan:

Yes.

Mr. Coggins:

I'm not sure that. What that means, I'm sorry.

Ms. Meehan:

It's just how it fits. It's not necessarily the size, but how it fits in with the neighborhood, the size of this neighborhood proportional, correct.

Mr. Coggins:

But these are, these are factors that may affect the continued designation. There's nothing that says, if you have this that happens, you automatically lose the designation. There's no regulation that says anything like that.

Ms. Meehan:

No

Mr. Coggins:

So you've got a number of factors that may or may not result in the loss of a continued designation and but you're not familiar either with anything about this particular project that would cause it, in fact, to lose that designation already,

Ms. Meehan:

No. And in fact, you don't rule out what Dr Hatem has said and what Ms. Gorman has

said, that it's actually improved the feature of continued contribution to the designation that might actually be right? You don't speak that, do you?

Ms. Meehan:

I can't speak to that No, it's not my place to say that. It's further contributing.

Mr. Coggins:

No, but she is qualified, in fact, directed by the UDO, to make a determination as to whether or not the word substantial improvement, whether or not this project meets the substantial improvement criteria, and I just want to make sure I understand what it is that you did in the course of making that determination, as I understand though, you did not make that determination, but you also do not dispute that under UDO, that this board is empowered and can stand in your shoes and make that determination. You don't dispute that do you

Ms. Meehan:

They have yes, they can hear the evidence and make their own decisions.

Chair Haislip:

But you getting close sir?

Mr. Coggins:

Yes. In fact, thank you for reminding me. It's good time Shut up. I'm through with the examination. If in terms of putting your witnesses understanding that we're going to be able to bring those two very short things, I was talking about.

Mr. Herman:

I apologize he brought up a lot there. Clarify. I'll try to be a brief.

Chair Haislip:

This is important. I mean, this is a very, very important. We need to give it to consideration that it deserves beyond and we need to be educate ourselves on, you know, what's been presented to one thing.

Ms. Gorman:

I just wanted to remind Stephen at one point that we discussed and have great conversation about is the fact that if, in fact, for some reason, God forbid that we have to raise the front house, I have a Live oak tree that's in the corner of my lot between Sandy and I, and in order to raise the house, we're going to have to severely prune that tree, which in that essence, probably will kill that tree. And I don't think Stephen has not mentioned that, but we want to get everything on the table.

Mr. Coggins:

I did fail to mention that, but in the but to show, to illustrate the point that she just making, if you go to our exhibit 17, there are collective photos of that tree that would have to be removed in the event that this particular corrective action is taken. And please note that also we have submitted the materials before you, the copy of the city of Southport UDO ordinance, tree ordinance, that explicitly underlines the valuable nature, the priceless nature

Chair Haislip:

We understand. Thank you very much.

Mr. Herman:

Mo, where in article five of the media does it say that the floodplain administrator has to make determination on the historical structure argument that opposing counsel is saying that you should have made

Ms. Meehan:

Nowhere.

Mr. Herman:

And is there a process, just generally speaking, in the UDO, let's say I wanted to go and get a determination or interpretation of the provision in the UDO or particular use. Is there a process for that? And how do you go about doing that?

Ms. Meehan:

Yes. You would ask for an interpretation of determination

Mr. Herman:

You would ask for a rendering or determination

Ms. Meehan:

Yes

Mr. Herman:

If I disagree with that determination, where do I go

Ms. Meehan:

The Board of Adjustment

Mr. Herman:

And how many days do I have to go and do that?

Ms. Meehan:

10? 30.

Mr. Herman:

30. Under state law it's 30. Did the property owners or the applicant, for that matter, ever go and ask for a determination

Ms. Meehan:

Not that I'm aware of

Mr. Herman:

So they never asked you or any other staff,

Ms. Meehan:

Not that I'm aware

Mr. Herman:

And there's no requirement under Article Five that states that you have to go and make a

determination to that effect, is that correct? And in fact, if, according to that SI/SD desk reference, and I apologize to the board. If you go to section, it's at the bottom of 6-23 and 6-24. Okay, so bear with me here. It goes through the historic structure exemption, and one of the exemptions is verbatim of what it says in one of the first half of the sentence of subsection B there, "any alteration historic structure, provided that the alteration but not precluded structures continued designation as historic structure." Then we continue on and it goes to the variance procedure, okay? So it goes through those two types of procedures, and then it says "communities may like to use one of the two approaches, either granting variances or exempting historic structures and SI SD requirements. Whichever approach is selected must be used in all cases when improvements or repairs are proposed for historic structures." Assuming that is true, that you can go through one or the other, since the city's UDO has a variance procedure, if this board were to go and address the historic structure issue, that would have to be through the variance procedure, and not confirm this purview tonight, because historic structure issue, arguably, is not pertaining to this board here, under this capacity of appealing notice of violation issue would be under their capacity as a variance. Is that right?

Ms. Meehan:
Yes

Mr. Herman:
There was a discussion that came up before we went into closed session about section 520, e as an elephant, subsection two regarding additions to prefrontal post frame structures that are substantial improvement with no modifications to the existing structure other than a standard one shall provide them in addition to providing the standard instruction. So there's discussion with that section one support. Are there any emails in your packet that have already been entered into the record that address that question asked to Eryn Futral?

Ms. Meehan:
Yes, there is.

Mr. Herman:
And what date was that?

Ms. Meehan:
That was April 12, 2023

Mr Herman:
And what page of the agenda pack you put so the board can 192 hopefully follow along. And I promise this might be the last one I want to go and make. Was that question asked by staff?

Ms. Meehan:
It was asked by staff.

Mr. Herman:
And who was it

Mr. Meehan:
Travis Henley

Mr. Herman:
Okay, and that was at 9:22, on April 12, 2023

Ms. Meehan:
Yes.

Mr. Herman:
So follow with me here Eryn's response was, what? And I might have proceeded it, but it was at 9:35

Ms. Meehan:
Yeah, She said, "Very good question. I appreciate you ruin your ordinance to figure out all available solutions. In this case there is a substantial change to the existing structure and the demolition of a portion of the structure. This would preclude the use of this section, and I still feel appropriate avenue is seeking a variance from the ordinance due to the structures contributing historic status in the National Register"

Mr. Herman:
Again, going through the variance procedure with historic Correct?

Ms. Meehan:
Yes,

Mr. Herman:
We have previsions for that in the UDO. In fact, they already they submitted a variance and already went in front of this board once

Ms. Meehan:
Yes, that is correct.

Mr. Herman:
I'm done. I reserve the right to direct Mo at the continued hearing or call any other witnesses.

Mr. Coggins:
It's the only clarification I asked you have before your definitional sections there in Section 5.5,

Ms. Meehan:
Yes

Mr. Coggins:
I believe there's a definition of variance.

Ms. Meehan:
The variance of floodplain development is a grant of relief and the requirements of this article.

Mr. Coggins:
And interestingly, there's no reference in there talking about board of adjustment or the

flood administrator or anything, doesn't it just says it's granting relief

Ms. Meehan:

The definition of a variance, yes.

Chair Haislip

Thank you. Thank you for our patience. All right, any questions, comments,

Mr. Herman:

I just have a question too. Sorry if you're going to go so you have to republish it. You say at the date and time. Is this going to go to you all's next meeting, or is it going to be at a meeting that you guys choose..

[Discussion with Mr. DiGuiseppe]

Chair Haislip

The next meeting.

Ms. Meehan:

February 25 Yeah.

Mr. Lemons:

Is there a reason we are putting it off for a month?

Chair Haislip:

I think there's a reason, because we think that the attorney needs enough time to review this information and address some of the issues that were brought up that we had probably questions about. So yeah

Mr. DiGuiseppe:

I was assuming it would just be easiest to slate on the same calendar instead of having to set up a different meeting. I don't need a month for myself.

Chair Haislip:

I don't think we need another meeting. I think we just keep the schedule we got.

Mr. Coggins:

We have no conflict.

Mr. Robbins:

I make a motion that we continue this hearing for the next regularly scheduled meeting the board adjustment

Mr. Masker:

Second

Chair Haislip:

All in favor. Signify by saying, aye,

Ayes by Mr. Masker, Mr. Allen, Mr. Eckert, Mr. Ross, Mr. Robbins

Any opposed?

Nay by Mr. Lemons

Mr. Coggins:

Mr. Chairman, we would be happy to reduce it to PDF format or exhibit some things we should put it in and submit it, I suppose, through your attorney and the court for distribution that would work

Chair Haislip:

All right, that was a vote. Continue this to the next meeting. We'll get we'll get to five minutes and then we got one more. Thank everybody for your patience

[5 minute break]

2. 101 E Moore St Variance [Mo Meehan]

Ms. Meehan, having been sworn in, presented the variance request. She explained that the applicant sought relief from Section 3.14, Table 3.4, regarding required off-street parking spaces. Ms. Meehan clarified that a previous variance for the same property was granted but was unrelated to the current request. The previous variance allowed vehicles to backout of the parking lot onto Howe St. The prior variance remains valid but is contingent on the approval of a major site plan, which has yet to be approved. Mr. Robbins expressed confusion regarding the relation between the two variances, questioning whether the previous variance still stood. Ms. Meehan confirmed that it did, explaining that it was conditioned upon the major site plan's approval. Without the site plan approval, the prior variance remains inoperative.

Ms. Meehan elaborated on the current variance application, highlighting the existing use of the property as Bullfrog Corner retail and Margaret Rudd Realty offices. The property is in the Central Business District (CBD), which has no setback requirements or minimum lot sizes. Historically, parking was not mandated, but current regulations require one parking space per dwelling unit in mixed-use developments.

The applicant plans to maintain the retail and office spaces on the ground floor and add two stories with four residential units above, necessitating four parking spaces. The planning board raised concerns about safety regarding vehicles reversing onto Howe Street and sought alternative solutions to address public safety.

Ms. Meehan presented a proposal influenced by NCDOT's recommendation to close the driveway, eliminate on-site parking, and install NCDOT-approved on-street parking spaces on Howe St. The new site plan includes the closure of the existing driveway and the addition of at least four public parking spaces on Howe Street.

Discussion ensued regarding the specifics of the parking proposal. Mr. Lemons questioned the origin of the recommendation, which Ms. Meehan confirmed came from an NCDOT engineer. Concerns were raised about the use of public parking for residential units, with Ms. Meehan clarifying that the spaces would remain public and not be reserved for the mixed-use residential units.

Mr. Robbins inquired about curbing and site modifications, with Ms. Meehan confirming the installation of curbing and adherence to NCDOT standards. Mr. Ross and Mr. Lemons questioned property ownership and access, learning that the applicant owns adjacent parcels but intends to restrict vehicle access while maintaining pedestrian pathways.

A detailed discussion emerged regarding the implications of overlapping variances and the potential for perpetual variances without corresponding site plan approvals. Legal counsel explained that previous variances become inoperative without an approved site plan incorporating them, clarifying concerns about lingering variances.

Ms. Schaefer, representing the applicant, emphasized the distinct nature of the current variance and its intention to address planning board safety concerns. She acknowledged the complications of the prior variance and presented the new proposal as a compromise, focusing on public safety and improved site functionality.

Further discussion centered around public safety, parking adequacy, and the legal implications of approving multiple variances. Board members expressed concerns about setting precedents and the long-term impact on CBD parking requirements.

Mr. Robbins voiced apprehension about eliminating residential parking requirements, citing potential strain on public parking. Mr. Allen referenced past city planning philosophies that upheld parking requirements in the CBD to prevent such issues, emphasizing the importance of maintaining parking standards.

Following the review of the findings, the board prepared to vote on the variance application.

Motion 1: Unnecessary hardship **would not** result from a strict application of the ordinance. It is not necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. **Motion by Mr. Robbins, Seconded by Mr. Eckert. Motion passes. all ayes**

Findings of Fact: Did not recognize a new use, especially when involving new construction, rose from level of creating a hardship that existed independent of the decisions of the property owner.

Motion 2: The hardship **does not** result from conditions that are peculiar to this property, such as location, size or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting variance. **Motion by Mr. Allen, seconded by Mr. Lemons. Motion passes, all ayes**

Findings of Fact: All other buildings in CBD that don't have parking

Motion 3: The hardship **did not** result from actions taken by the applicant or property owner, The act of purchasing property with knowledge that circumstances exist that might justify a variance shall not be considered as a self-created hardship. **Motion by Mr. Robbins, seconded by Mr. Lemons. Motion passes, all ayes**

Findings of Fact: The Planning Board

Motion 4: The requested variance **is not** consistent with the spirit, purpose, and intent of the ordinance such that public safety is secured, and substantial justice achieved. **Motion by Mr. Allen, seconded by Mr. Robbins. Motion passes 5 ayes, 1 nay [5-1]**

Findings of Fact: Parking requirement is in the UDO for a reason

Motion 5: Based on the findings of fact and the evidence presented, the Board of

Adjustment recommends **denial** of the variance application based on the fact three of the four required motions failed to pass, leading the Board of Adjustment to recommend denial of the variance application based on the failure to meet the necessary criteria. ***Motion made by Mr. Allen, seconded by Mr. Robbins. Motion passes, all ayes.***

I. Other Business

None

J. Adjourn

A motion was made to adjourn by Mr. Allen, seconded by Mr. Masker. ***Unanimous vote, Motion passes***

Adjourned at 8:30 pm

**STAFF REPORT
CASE # AP-25-01
APPEAL OF DETERMINATION OF THE FLOODPLAIN ADMINISTRATOR**

APPLICATION SUMMARY	
Hearing Date	February 25, 2025 January 28, 2025 Board of Adjustment
Property Owners	Brenda J. Gorman and Robert Howard
Property Address	406 Brunswick Street
Parcel ID:	237LE036
Parcel Acreage	0.47 acres
Zoning District	R-10

APPEAL REQUEST

Stephen Coggins and John Fisher, attorneys for property owners Brenda J. Gorman and Robert Howard gave Notice of Appeal of the Order to Take Corrective Action to Maureen Meehan, Floodplain Administrator and Noah Saldo, Clerk of the City of Southport on October 28, 2024.

The applicants were issued a written Order to Take Corrective Action on October 18, 2024, for a violation to the city's floodplain damage prevention ordinance. The order outlines corrective actions to be taken by the Owners within 180 calendar days of the date of the order. The corrective actions include elevating the existing structure to the regulatory flood elevation or remove or detach the new addition from the existing historic structure.

APPEAL PROCEDURE

Per Section 5.17.D of the Floodplain Damage Prevention Ordinance, any owner who has received an order to take corrective action may appeal from the order to the Board of Adjustment by giving notice of appeal in writing to the floodplain administrator and the clerk within 10 days following issuance of the final order. In the absence of an appeal, the order of the floodplain administrator shall be final. The Board of Adjustment shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.

An appeal of an administrative development decision must follow quasi-judicial procedures, as outlined at G.S. 160D-406. Among other things, notice must be mailed and posted on the property; witnesses must provide sworn testimony and factual evidence; and the board must base its decision upon competent, substantial, relevant

The board of adjustment makes its own independent assessment of what the terms of the ordinance mean and “shall have all the powers of the official who made the decision” being appeal from. While some consideration as to the professional judgement of the zoning administrator should be given, ultimately the question of what the ordinance means is a question of law for which the board must make its own decision. In making this determination the key goal should be giving full effect to the terms of the ordinance and the intent of the governing board that originally adopted it, not substituting the opinion of staff as to what the ordinance should say. The Board of Adjustment is an independent Board governed by the UDO.

The board must determine any contested facts and apply relevant legal standards. The board may affirm the staff decision, reverse the staff decision, or modify the staff decision, and the board may “make any order, requirement, decision, or determination that ought to be made.”

Appeals of administrative decisions are decided by a simple majority vote. The decision of the board of adjustment may be appealed to the superior court in certiorari pursuant to G.S. 160D-1402.

APPLICANT’S JUSTIFICATION FOR APPEAL

The following are the grounds for the appeal submitted by joint counsel for the property owners:

1. The project is not a “substantial improvement” within the meaning of Article 5 of the UDO, and
2. The project is a historical property that is exempt under Section 5.20.E.5.b) of the substantial improvement requirements set forth in Article 5 of the UDO.

STAFF REVIEW

This item continues the appeal hearing from your January 28, 2025, meeting. The Board requested time to review the applicant's exhibits, request that staff provide more information on the Community Rating System (CRS) and determine if any line items in the applicant's final project cost calculation can be removed.

Community Rating System (CRS)

The goal of the national flood insurance program is to offer flood insurance, reduce flood loss through activities at the local level, such as elevating and floodproofing structures, and provide savings to taxpayers. The CRS helps fulfill the goals through incentives and tools for local governments.

As stated in the CRS coordinator’s manual:

Appeal 25-01 Staff Report BOA 2-25-2025

The CRS recognizes, encourages, and rewards—by the use of flood insurance premium adjustments—community and state activities that go beyond the minimum required by the NFIP to

- *Reduce and avoid flood damage to insurable property,*
- *Strengthen and support the insurance aspects of the NFIP, and*
- *Foster comprehensive floodplain management.*

https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinators-manual_2017.pdf

Adoption of a local flood ordinance is a requirement of the National Floodplain Insurance Program's (NFIP) community rating system (CRS) to ensure all development within special flood hazard areas follows and exceeds the standards of the NFIP. The CRS program recognizes communities that implement more than the minimum requirements of the NFIP by reducing flood insurance rates throughout the community.

There are 19 credit activities and ten (10) CRS classes based on the number of credits accumulated by a community's activities. The lower the CRS class, the higher the flood insurance premium for individual property owners. Each activity may be pro-rated based on the level of compliance with each activity. Further, there are prerequisites to get to a lower class and a higher insurance rate increase. The chart below outlines the different activities and maximum points possible.

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Table 110-2. Credit points awarded for CRS activities.*				
Activity	Maximum Possible Points	Maximum Points Earned	Average Points Earned	Percentage of Communities Credited
300 Public Information Activities				
310 Elevation Certificates	116	116	38	96%
320 Map Information Service	90	90	73	85%
330 Outreach Projects	350	350	87	93%
340 Hazard Disclosure	80	62	14	84%
350 Flood Protection Information	125	125	38	87%
360 Flood Protection Assistance	110	100	55	41%
370 Flood Insurance Promotion ⁵	110	110	39	4%
400 Mapping and Regulations				
410 Flood Hazard Mapping	802	576	60	55%
420 Open Space Preservation	2,020	1,603	509	89%
430 Higher Regulatory Standards	2,042	1,335	270	100%
440 Flood Data Maintenance	222	249	115	95%
450 Stormwater Management	755	605	132	87%
500 Flood Damage Reduction Activities				
510 Floodplain Mgmt. Planning	622	514	175	64%
520 Acquisition and Relocation	2,250	1,999	195	28%
530 Flood Protection	1,600	541	73	13%
540 Drainage System Maintenance	570	454	218	43%
600 Warning and Response				
610 Flood Warning and Response	395	365	254	20%
620 Levees	235	207	157	0.5%
630 Dams	160	99	35	35%
* Figures are based on communities that have received verified credit under the 2013 <i>CRS Coordinator's Manual</i> (about 43% of CRS communities), as of October 2016. The maximum possible points are based on the 2013 <i>Coordinator's Manual</i> . Growth adjustments are not included.				

The City of Southport is a Class 7 community that provides a 15% insurance reduction for properties within the special flood hazard area (SFHA) and 5% in non-SFHA areas. To be eligible for a Class 7 community, the city must meet the Class 8 freeboard prerequisite. This prerequisite requires the city to include and enforce freeboard for residential buildings. I have attached the Class 8 Freeboard Prerequisite FAQs to this report.

Substantial Improvement/Substantial Damage

All new construction in special flood hazard areas must meet elevation and/or floodproofing requirements. Existing properties within SFHA (AE – VE- Coastal A) can remain and maintenance and additions to the structures are allowed to remain as built. When improvements are made to existing homes elevation and flood prevention measures are not required, unless construction costs exceed 50% of the market value of

the structure. It is important to reiterate that this is not the value of the entire property, only the structure at the time of construction. Exceeding this threshold is defined as substantial improvements. All substantial improvements require that the entire structure comply with new construction standards, including elevation.

At the time of a building permit application to modify an existing structure within the SFHA, the floodplain manager must determine if the improvements will trigger substantial improvements. The most restrictive requirements must be met if the structure is within two (2) or more zones. Chapter 6 of the Substantial Improvement/Substantial Damage Desk Reference outlines the factors to consider when evaluating a permit for repairs or improvements to existing structures and is attached to this report.

The applicant must provide cost estimates and a professional market rate appraisal. The building official and the floodplain administrator are responsible for reviewing the validity of the data. The cost of construction includes the complete costs associated with all work proposed. Costs include all materials, labor, and other items necessary to perform the proposed work—chapter 4 of the Substantial Improvement Substantial Damage Desk Reference, which is attached to this report. Sections 4.4.1 and 4.4.2 outline the costs that are and are not required for calculating the total construction cost.

Upon review of the total cost estimates provided by the applicant, all of the line items must be included in the total cost of construction.

Timeline of Events

The property owners of 406 Brunswick Street submitted a building permit for an addition to an existing structure in January of 2023. Upon reviewing the application, the applicants were notified that a floodplain permit was necessary, since the structure is located in the Coastal A and AE 11 flood zones. Further, the property owners were informed that if the proposed cost of the addition exceeds 50% of the market value of the structure, it is then considered a substantial improvement, and, therefore, both the addition and the existing structure must comply with current Coastal A/V-zone standards for residential uses.

A meeting with city planning and building officials and the applicant was held after the substantial improvement determination to discuss options to meet the current floodplain ordinance. Since the home is located in the Coastal A zone, stricter standards are required than just for AE flood zones. This was explained to the applicant and that if the project cost was reduced, then there would be no requirement for compliance of the flood ordinance elevation standards.

Between February and April 2023, staff in correspondence with Erin Futral, NC NFIP Planner, worked with the applicant to ensure all exceptions provided in the floodplain damage prevention ordinance were considered that the structure did not meet the criteria for exception.

The applicant applied for a variance to Section 5.20.E.2 Additions/Improvements to allow the existing home to remain unmodified, Section 5.5 Substantial Improvements since the

existing home would not be modified, and Section 5.25 standards for Coastal A Zones, since the addition is not located in the Coastal A flood zone. The variance was heard at the July 2023 Board of Adjustment meeting. No decision was made and the Board of Adjustment continued the hearing to receive further information.

The applicant, after the Board of Adjustment meeting formally requested that the variance application be put on hold to consider a modified building plan and acquire a new appraisal. The appraisal for the structure was submitted to staff in August of 2023 with new building plans that would not trigger substantial improvement requirements. The building permit was issued with the commitment from the applicants that they would remain under the 50% value of the structure including submitting updated costs throughout the building process.

In February of 2024, upon completion of the home, the applicants submitted a final cost breakdown of the entire project to the building inspector at the time they requested final inspections for a certificate of occupancy. The costs exceeded the total cost allowance because the addition exceeded the 50% threshold.

The former floodplain administrator issued a courtesy Notice of Violation and Determination on June 28, 2024 to the property owners. Upon no action to remedy the violation, a Violation Notice of Hearing was subsequently sent to the property owners on August 27, 2024. A hearing was held on September 9, 2024 allowing the applicants the ability to submit evidence and arguments pertaining to the violation. After the hearing, an Order to Take Corrective Action was signed on October 18, 2024 requiring the applicant to elevate the entire structure or remove or detach the addition from the existing structure.

Staff Review of Grounds for Appeal

1. Applicant states, "The project is not a "substantial improvement" within the meaning of Article 5 of the UDO, and"

Staff Review:

- a. The cost of construction exceeds 50% of the market value of the structure before the "start of construction" of the improvement. The start of construction is at the time of the issuance of the building permit.
- b. The approved 50% appraised value is \$319,000.
- c. An email dated February 28, 2024, the applicant states: "We are sensitive to the fact that we have a \$319,000.00 improvement limit on the current permitting for the new construction. We previously committed that we will not exceed our maximum provided for under the current permitting." The attached construction costs for the project were attached to the email totaling \$228,015.16.
- d. At the completion of the project, the applicants sent their final construction costs and an email dated June 3, 2024 stating that their project had gone over budget due to inflation. The final total construction cost is \$331,137.11.

- i. Statement from the applicant to the Building Inspector in the email dated June 3, 2024:

“Just this year alone, according to the US Bureau Of Labor Statistics the purchasing value of \$319,000.00 has increased to \$326,073.73. Our approval is \$319,000.00 authorized when the permit was issued, our actual cost to date is \$331,137.11 or 3.8% over the approval. In fact, since the time, we first applied for a permit the cost has increased much more than we had ever anticipated. One way of considering our overage is that prices at a minimum have increased 2.2% this year so in reality we missed our target by 1.6%. Obviously, we regret this, we didn’t want to spend the additional money either but by the time we realized our situation it was far too late to react.”
- e. At the request of the applicants for clarifying information, Eryn Futral, NFIP Planner for the NC Department of Public Safety, shared in an email dated September 19, 2024, that the substantial damage/improvement regulations do not make any exceptions to the rule. Instead, the project's total cost is the basis for determining 50% calculations. Therefore, there are no references that address inflation. All guidance refers to the actual costs of improvements.

Staff determine the project is a substantial improvement.

- 2. The applicant states: “The project is a historical property that is exempt under Section 5.20.E.5.b) of the substantial improvement requirements set forth in Article 5 of the UDO.”

Staff Review:

- a. The structure is listed as a contributing structure on the City of Southport’s National Register of Historic Places.
- b. The new and the existing structure must remain contributing to the National Register to qualify for a variance from elevation and floodproofing of historic structures.
- c. The project includes the demolition of an existing historic addition and construction of a new two story addition. The size and mass of the addition could prevent the structure from being considered a contributing historic structure.
- d. Permit applications for improvements (including additions) or repairs of historic structures should be accompanied by two pieces of evidence: (1) documentation that confirms the structure is designated a historic structure, and (2) documentation that confirms the proposed work will not preclude the structure’s continued designation. There is no accompanying documentation to confirm either of these items at the time of application.

Staff determine that the structure is historic and is not exempt from the substantial improvement requirements.

BOARD OF ADJUSTMENT: DECISION

- ☐ Affirms the staff determination based on the following:

- ☐ Modifies the staff determination, including the following:

- ☐ Reverses the staff determination based on the following:

The final decision shall be reduced to writing, reflect the board's determination of contested facts and their application to the applicable standards, and be approved by the board and signed by the chair or other duly authorized member of the board.

Attachments:

Chapter 4 SI/SD Desk Reference
Chapter 6 SI/SD Desk Reference
Site Plan September 2023
Survey of Property
Construction Cost Final June 2024

4 Making Substantial Improvement and Substantial Damage Determinations

4.1 Overview

Administering the SI/SD requirements requires local officials to perform four major actions: (1) determine costs, (2) determine market values, (3) make SI/SD determinations, and (4) require owners to obtain permits to bring substantially improved or substantially damaged buildings into compliance with the floodplain management requirements. This chapter describes how to determine whether work is a substantial improvement or a repair of substantial damage. The first step is to review estimates of the improvement or repair costs; this step involves deciding which costs to include and exclude. Next, the market value of the structure must be determined. There is more than one way to determine costs and market value, and the local official must examine both for reasonableness and accuracy.

The I-Codes include, in the administrative provisions, two requirements pertinent to the data necessary to make SI/SD determinations. Applicants must:

- State the valuation of proposed work, and
- Give other data and information as required by the building official.

Communities must be prepared to explain to permit applicants how they make SI/SD determinations. Local officials should develop written procedures that can help them make and document consistent determinations and improve efficiency, especially in the post-disaster period when large numbers of buildings may be damaged.

Chapter 5 outlines community responsibilities that are specifically related to administering these SI/SD requirements. Chapter 6 describes factors to consider when evaluating permit applications and all aspects of bringing substantially improved and substantially damaged buildings into compliance; it also includes illustrations of improvements and repairs.

Chapter 7 addresses handling substantial damage in the post-disaster period, with recommendations for planning ahead to be prepared for the added workload and demands on staff and resources. It describes some methods that can help communities focus their efforts when many damaged buildings may have to be evaluated. It also describes FEMA's *Substantial Damage Estimator* (SDE) software that communities can use to collect information about damaged buildings in order to make substantial damage determinations.

4.2 Accuracy and Verification

Costs of proposed repairs or improvements and market values are needed to determine whether proposed work is SI/SD. Methods for obtaining this information are described in Sections 4.4 and 4.5, respectively. Local officials are responsible for verifying that the data are complete and reasonable. The local official is responsible for reviewing the validity of all cost estimates provided by applicants, whether prepared by licensed contractors, engineers, architects, professional cost estimators, or by property owners. When work is repair of damage, an inspection visit should be made to verify that the proposed work is all of the work that is necessary to restore the building to its pre-damage condition.

Applicants may disagree with a community's SI/SD determination. In these cases, the burden is on the applicant to provide improved cost estimates or to obtain a professional appraisal of market value. The local official is responsible for reviewing the new information. In some cases, applicants may seek a formal appeal of the local official's decision (Section 5.6.6).

To be consistent, local officials should document their decisions and the documentation should be retained in the community's permit records. A sample worksheet that can be used to document SI/SD determinations is included in Appendix D. Maintaining good records and documentation is especially critical if a community has elected to administer a cumulative SI/SD requirement (Section 5.7.3).

4.3 Making SI/SD Determinations

Work on buildings ranges from routine maintenance and minor repairs (which may not require permits) to work that costs more than 50 percent of a structure's market value. Local officials who are responsible for administering their floodplain management regulations or codes are responsible for determining whether work is SI/SD. Other entities, such as insurance claims adjusters, may make estimates of damage for purposes of adjusting damage claims. However, an adjuster's estimate must not be used to make SI/SD determinations because the estimates of damage that determine the amount of a claim payment may not include all of the costs to repair the building to its pre-damage condition.

Consistency is important. Communities should decide in advance how they will handle significant flood events and develop written procedures for making decisions. It is easier to defend SI/SD determinations if all applicants are treated the same, especially when many buildings have been damaged (see Chapter 7).

Figure 4-1 illustrates an overview of the steps in the SI/SD determination that are described in detail in this Desk Reference. Once the cost of the work and the market value of the structure have been determined, the local official must make a final determination. The work is SI/SD if the ratio of the cost of work to the market value equals or exceeds 50 percent:

$$\frac{\text{Cost of Improvement or Cost to Repair to Pre-Damage Condition}}{\text{Market Value of Building}} \geq 50\%$$

Communities may use a combination of sources for the data needed to make SI/SD determinations. For example, a community may make SI/SD determinations based on applicant-supplied costs of repairs or improvements and community-obtained market values.

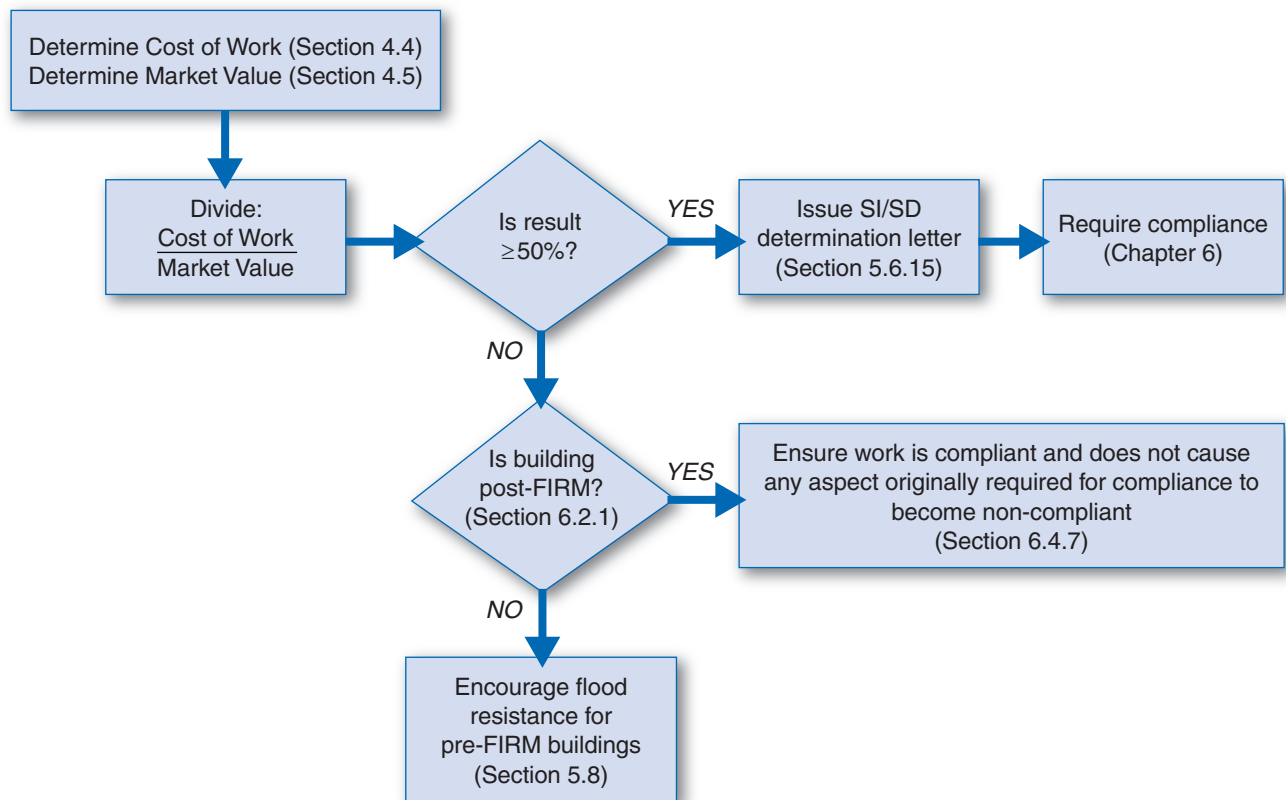


Figure 4-1. Make the SI/SD determination (overview)

4.3.1 SI/SD Provisions in the 2006 and 2009 I-Codes

The IBC and IRC apply to new construction and also to alteration, movement, enlargement, replacement, and repair of existing buildings. The IBC, the IRC, and the IEBC include SI/SD provisions that are consistent with the NFIP's requirements. The specific code provisions are described below:

- **IBC.** The IBC relies on the definitions of “substantial improvement” and “substantial damage” in Section 1612. The code official must determine whether any alteration, repair, or addition to existing buildings, or work associated with a change of occupancy or moved buildings, meets those definitions. Section 1612.1 states that “all new construction of buildings, structures, and portions of buildings and structures, including substantial improvement and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads.” In addition, the requirements for existing buildings, including historic buildings, are found in IBC Chapter 34.
- **IRC.** The IRC contains detailed administrative provisions in Chapter 1:
 - **R105.3.1.1 Substantially improved or substantially damaged buildings and structures in areas prone to flooding.** This section specifies that the building official shall examine

applications and prepare a finding with regard to the value of the proposed work. If the value equals or exceeds 50 percent of the market value of the building before the damage occurred or the improvement is started, the finding is provided to the board of appeals.

- **R112.2.1 Determination of substantial improvement in areas prone to flooding.** This section requires the board of appeals to determine if a proposal, referred to the board by the building official pursuant to Section R105.3.1.1, constitutes a substantial improvement (or repair of substantial damage). If the proposed work is found to be a substantial improvement or repair of substantial damage, the work must meet the requirements of Section R324 (Flood-Resistant Construction).

- **IEBC.** The IEBC is organized based on the nature of the work: repairs; repair of damaged buildings; alterations (Levels 1, 2, and 3); work associated with change of occupancy classification; additions (horizontal, vertical, new/raised foundations); and relocated or moved buildings. These characterizations of work are similar to those used in Chapter 6 (also see Table 3-1, which lists the definitions and terms used in the IEBC). The provisions of the IEBC that pertain to flood resistance are all triggered by a determination of whether the work constitutes a substantial improvement or a repair of substantial damage. When that occurs, the IEBC requires the building to be brought into compliance with the flood damage-resistant provisions of the IBC (located in IBC Section 1612). The IEBC also includes provisions for historic structures that are located in SFHAs.

4.4 Determining Costs of Improvements and Costs to Repair

The term “costs of improvements” includes the complete costs associated with all of the types of work that are described in Chapter 6. The term “costs to repair” includes the costs of all work necessary to restore a damaged building to its pre-damage condition. Both terms include the costs of all materials, labor, and other items necessary to perform the proposed work. Costs that must be included are described in Section 4.4.1 and certain costs that may be excluded are described in Section 4.4.2. Figure 4-2 illustrates the steps that local officials need to take in order to determine costs for making SI/SD determinations.

The term “substantial damage” refers to the repairs of all damage sustained and cannot reflect a level of repairs that is less than the amount of the damage sustained. If an owner does not intend to repair the damaged building right away or if the owner cannot afford to make all repairs immediately, the local official should inspect the property to determine whether, based on estimates, the work required to restore it to its pre-damage condition will constitute substantial damage. If this is the case, then the cost to repair is compared to the building’s market value and the local official should provide written notice to the owner of the substantial damage determination. The local official should include in the written notice information about obtaining permits and about the floodplain management requirements that must be met. Further, sometimes these buildings also are improved beyond their pre-damage condition. If proposed, then the cost of improvements must be included along with the cost to repair to make the SI/SD determination. Note that the substantial damage requirement applies regardless of the cause of damage, such as wind or fire.

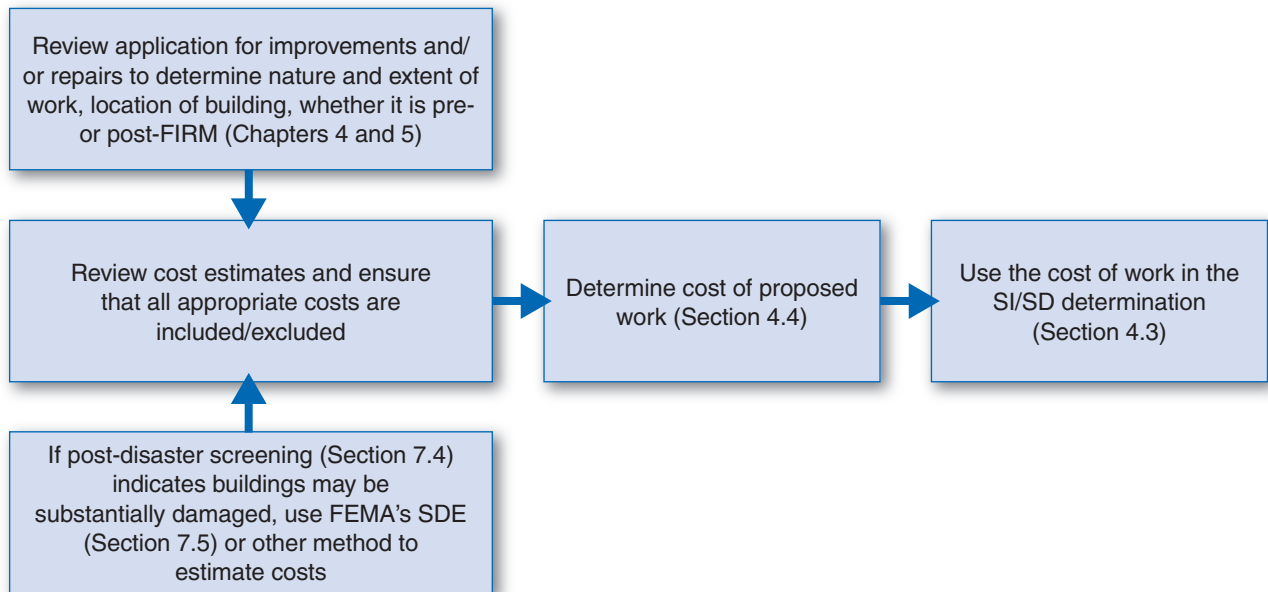


Figure 4-2. Determine the cost of work (overview)

The following topics related to determining costs will be covered in this section:

- Costs that must be included
- Costs that may be excluded
- Acceptable sources of cost information
- Estimates of donated or discounted materials
- Estimates of owner and volunteer labor
- Demolition, debris, and disposal
- Clean-up and trash removal
- Cost exclusions to correct existing health, safety, and sanitary code violations

Local officials will need to determine the necessary level of detail for the costs of improvements and costs of repairs from permit applicants or contractors in order to make a SI/SD determination.

4.4.1 Costs That Must be Included in SI/SD Determinations

Items that must be included in the costs of improvement and the costs to repair are those that are directly associated with the building. The following list of costs that must be included is not intended to be exhaustive, but characterizes the types of costs that must be included:

- Materials and labor, including the estimated value of donated or discounted materials (Section 4.4.4) and owner or volunteer labor (Section 4.4.5)
- Site preparation related to the improvement or repair (e.g., foundation excavation or filling in basements)
- Demolition and construction debris disposal (Section 4.4.6)

- Labor and other costs associated with demolishing, moving, or altering building components to accommodate improvements, additions, and making repairs
- Costs associated with complying with any other regulations or code requirement that is triggered by the work, including costs to comply with the requirements of the Americans with Disabilities Act (ADA)
- Costs associated with elevating a structure when the proposed elevation is lower than the BFE
- Construction management and supervision
- Contractor's overhead and profit
- Sales taxes on materials
- Structural elements and exterior finishes, including:
 - Foundations (e.g., spread or continuous foundation footings, perimeter walls, chain-walls, pilings, columns, posts, etc.)
 - Monolithic or other types of concrete slabs
 - Bearing walls, tie beams, trusses
 - Joists, beams, subflooring, framing, ceilings
 - Interior non-bearing walls
 - Exterior finishes (e.g., brick, stucco, siding, painting, and trim)
 - Windows and exterior doors
 - Roofing, gutters, and downspouts
 - Hardware
 - Attached decks and porches
- Interior finish elements, including:
 - Floor finishes (e.g., hardwood, ceramic, vinyl, linoleum, stone, and wall-to-wall carpet over subflooring)
 - Bathroom tiling and fixtures
 - Wall finishes (e.g., drywall, paint, stucco, plaster, paneling, and marble)
 - Built-in cabinets (e.g., kitchen, utility, entertainment, storage, and bathroom)
 - Interior doors
 - Interior finish carpentry
 - Built-in bookcases and furniture
 - Hardware
 - Insulation

- Utility and service equipment, including:
 - Heating, ventilation, and air conditioning (HVAC) equipment
 - Plumbing fixtures and piping
 - Electrical wiring, outlets, and switches
 - Light fixtures and ceiling fans
 - Security systems
 - Built-in appliances
 - Central vacuum systems
 - Water filtration, conditioning, and recirculation systems

4.4.2 Costs That May be Excluded from SI/SD Determinations

Items that can be excluded are those that are not directly associated with the building. The following list characterizes the types of costs that may be excluded:

- Clean-up and trash removal (Section 4.4.7)
- Costs to temporarily stabilize a building so that it is safe to enter to evaluate and identify required repairs
- Costs to obtain or prepare plans and specifications
- Land survey costs
- Permit fees and inspection fees
- Carpeting and recarpeting installed over finished flooring such as wood or tiling
- Outside improvements, including landscaping, irrigation, sidewalks, driveways, fences, yard lights, swimming pools, pool enclosures, and detached accessory structures (e.g., garages, sheds, and gazebos)
- Costs required for the minimum necessary work to correct existing violations of health, safety, and sanitary codes (Section 4.4.8)
- Plug-in appliances such as washing machines, dryers, and stoves

4.4.3 Acceptable Sources of Cost Information

The costs of improvements and the costs to repair are necessary to make the SI/SD determination. The following are acceptable methods to determine the costs:

- Itemized costs of materials and labor, or estimates of materials and labor that are prepared by licensed contractors or professional construction cost estimators.
- Building valuation tables published by building code organizations and cost-estimating manuals and tools available from professional building cost-estimating services. These sources can be used as long as some limitations are recognized, notably that there are local

variations in costs and the sources do not list all types and qualities of structures. These sources should not be used for structures that are architecturally unique, exceptionally large, or significantly different from the classes of structures that are listed.

- “Qualified Estimate” of costs that are prepared by the local official using professional judgment and knowledge of local and regional construction costs. This approach is most often used post-disaster when there are large numbers of damaged buildings and when permits must be quickly processed.
- Building owners may submit cost estimates that they prepare themselves. If the community is willing to consider such estimates, owners should be required to provide as much supporting documentation as possible (such as pricing information from lumber companies and hardware stores). In addition, the estimate must include the value of labor, including the value of the owner’s labor (Section 4.4.5).

FEMA developed the *Substantial Damage Estimator*, summarized in Section 7.5, to provide estimates of building values and costs to repair. In general, this method is most often used in the post-disaster period when local officials need to inspect large numbers of damaged structures and make many substantial damage determinations.

4.4.4 Estimates of Donated or Discounted Materials

To help make improvements or repairs to damaged homes, some organizations and individuals donate materials, and some companies donate or provide materials at a discount. The value placed on all donated or discounted materials should be equal to the actual or estimated cost of such materials and must be included in the total cost. Where materials or servicing equipment are donated or discounted below normal market values, the value should be adjusted to an amount that would be equivalent to that estimated through normal market transactions.

As part of the documentation required for a permit, the applicant should provide cost estimates of the value of donated or discounted materials based on actual or estimated costs. This estimate should be verified by the local official based on professional judgment and knowledge of local or regional material costs. Some communities help non-profit organizations and applicants make these estimates.

4.4.5 Estimates of Owner and Volunteer Labor

The situations described in Section 4.4.4 that involve donated or discounted materials may also involve volunteer labor. Also, property owners may undertake fairly significant improvement and repair projects on their own. In both cases, the normal “market” value or “going rate” for labor must be included in the estimates of the cost of improvements and the costs to repair. After significant events, labor rates may change and should be taken into account.

Labor rates vary geographically and by the nature of the work and trade required. As part of the documentation required for a permit, the applicant should provide an estimate of the value of owner or volunteer labor. The value placed on labor should be estimated based on applicable minimum-hour wage scales for the skill and type of construction work that is done. This

estimate should be verified by the local official based on professional judgment and knowledge of the local or regional construction industry wage scales. Some communities help non-profit organizations and permit applicants make these estimates.

4.4.6 Demolition and Construction Debris Disposal

Demolition and construction debris disposal is not the same as clean-up and trash removal (Section 4.4.7). Virtually any type of work on a building requires some demolition. It may be as little as removing the flooring or an interior wall, or as much as complete removal of a portion of the building and its foundation. Demolition may be part of an improvement project and usually is a necessary part of repairing damage. The costs of demolition, including the costs of disposal of the resulting debris, must be included in the cost of work for the purpose of making the SI/SD determination.

4.4.7 Clean-up and Trash Removal

Clean-up and trash removal are distinguished from demolition and construction debris disposal (Section 4.4.6). Clean-up and trash removal costs are not included in the costs used in the SI/SD determination because they are not related to the actual cost of improving or repairing a building.

Clean-up costs include such work as draining a basement; removing dirt and mud; and cleaning, disinfecting, and drying out buildings. Trash removal includes disposing of trash piled in the interior of the building or accumulated on the lot and related costs (e.g., dumpster, hauling, and tipping fees), as well as removal of abandoned contents and debris related to general clean-up of the structure before the improvement or repairs can be performed.

If clean-up and trash removal are done at the same time as demolition and construction debris disposal, a cost estimate should clearly distinguish between costs that must be included and costs that may be excluded. Local officials can:

- Require property owners to submit itemized costs from all contractors, clearly identifying the costs related to trash disposal and clean-up from those related to demolition necessary to perform the work on the building, or
- Based on judgment and knowledge of local costs, estimate the amounts to be excluded. The permit record should contain documentation of the basis for making this estimate.

4.4.8 Costs to Correct Existing Health, Safety, and Sanitary Code Violations

The definition of substantial improvement provides an exclusion for “[a]ny project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions” (emphasis added).

When deciding whether to exclude the costs to correct existing cited health, safety, and sanitary code violations, local officials must consider the following:

■ **Correct existing cited violations.** The work must be:

- Limited to that necessary to correct an existing violation. This means that only work that is directly required for correction can be excluded from the costs of the proposed improvement or repair. All other work must be counted in the estimation of costs.
- Required to correct an existing violation. This means the condition considered in violation pre-dates the application for a permit (or the date of a damage event) and, importantly, an official who has the authority to enforce the community's health, safety, and sanitary codes must have prior knowledge of the condition and must have verified that it constitutes a violation.
- Required to correct an existing violation. Violations of a community's health, safety, and sanitary represent threats to public health and safety. Such conditions are considered violations only if they have been identified as violations. The mere presence of a condition that does not conform to current codes does not qualify as a violation.

■ **Identified by the local code enforcement official.** To exclude certain costs from the SI/SD determination, an official who has the authority to enforce the community's health and sanitary codes must have knowledge of and have identified the condition, and must have verified or determined that the condition constitutes a violation (normally, this involves issuing a citation or other official notice). Communities might not make a routine practice of inspecting structures in order to document and issue citations for violations. If likely violations of health and sanitary codes are identified by the property owner or contractor during the course of deciding what work to perform and before any improvements or repairs are made, the costs to address those code violations may be excluded, but only if the local official has made the determination that they can be excluded.

■ **Minimum necessary to ensure safe living conditions.** To qualify as excludable, the cost of correcting existing violations must be only those costs for the work that is the minimum necessary to address and resolve the violation. Costs of work in excess of the minimum necessary must be included in the SI/SD determination.

For proper treatment of this substantial improvement exclusionary provision, a clear distinction must be made between violations and elements that simply do not meet the present-day design or building code standards. The following examples describe situations where the work performed to meet code requirements must be included in SI/SD determinations and some situations where costs may be excluded:

- Work on a building, or work associated with a change in use or occupancy, may trigger requirements for compliance with the current code. When this occurs, the costs associated with compliance do not qualify for exclusion because the work is not a code violation, but is necessary to meet current code. For example, consider an applicant who applies for a permit to perform work necessary for a change of occupancy from retail space to a restaurant. This will trigger certain code requirements and those costs must be included in the SI/SD determination. Costs that are related to compliance with current code requirements, but are not related to correcting existing violations must be included.

- The owner of a poorly insulated building proposes to rehabilitate it for a new occupant. Although the building does not conform to the current code for energy efficiency, the costs of adding insulation and other energy efficiency work must be included because the lack of adequate insulation is not a health and safety violation.
- An owner proposes to improve a building and has applied for a permit. The owner presents the building official with evidence of termite damage. Termite damage is discovered in the floor joints and the joists are unable to safely support loads required by current code. The building official verifies that it constitutes a violation and cites it as a safety code violation. The minimum cost to correct this violation may be excluded if the violation was cited. If other building components have sustained termite damage that is not a safety code violation, such as damage to non-bearing wall studs and wall trim, the cost to address the damage must be included.
- A restaurant's plumbing system is failing and bathroom fixtures are inoperable. The condition is cited as a violation of the sanitary code. The owner proposes not only to correct the violation but make other improvements, including adding a second bathroom. The costs to correct the failing plumbing system and replace its fixtures may be excluded. The costs of the other improvements, including the second bathroom, must be included.
- In the course of inspecting an abandoned building, the code official cites several conditions as violations that must be corrected before the building can be reoccupied. The building is subsequently purchased and the new owner applies for a permit to not only address the violations, but also to rehabilitate the building. Only the costs to correct the cited violations that are explicitly related to health, sanitary, and safety code requirements may be excluded. All other costs associated with the rehabilitation must be included in the cost of improvements.
- The owner of a home has been notified that the home is not safe to occupy because of violations of the electrical code provisions. Rather than perform only the required repairs, the owner decides to completely renovate the home and submits an application that shows all renovation costs, while excluding the costs associated with all of the electrical work (including replacing all wiring and fixtures, installing more outlets, upgrading the panel board, etc.). The plan reviewer should catch this discrepancy. The only costs that may be excluded are those that are necessary to correct the violation – which means the costs associated with the code violation must be determined before they can be excluded from the SI/SD determination. All other costs associated with the upgrade of the electrical work must be included.

4.5 Determining Market Value

For purposes of making SI/SD determinations, local officials need to determine the “market value” of structures in question. When work is an improvement, the market value is the building’s market value “before the ‘start of construction’ of the improvement.” When work is repair of substantial damage, the market value is the building’s market value “before the damage occurred.” If buildings have not been maintained and have deteriorated over time, then the market value is determined as of the date of the application for the permit to improve or repair the building.

The NFIP regulations do not define “market value.” Generally, market value can be explained as the amount an owner would be willing but not obliged to accept, and that a buyer would be willing but not compelled to pay. The term may be defined by State statutes that pertain to zoning, property taxation, or real estate transactions.

Before reviewing options to determine the market value of a structure, it is important to note two basic NFIP requirements:

- Market value must always be based on the condition of the structure before the improvement is undertaken or before the damage occurred.
- Only the market value of the structure is pertinent. The value of the land and site improvements (landscaping, driveway, detached accessory structures, etc.) and the value of the use and occupancy (business income) are not included. Any value associated with the location of the property should be attributed to the land, not the building.

Many communities require the permit applicant to obtain an appraisal of market value from a qualified professional who is licensed to perform appraisals in the State or community where the property is located (Section 4.5.1). In addition, three other methods to estimate market value are covered in this section:

- Assessed value developed for property tax assessment purposes, adjusted to approximate market value (Section 4.5.2)
- Estimates of a structure’s actual cash value, including depreciation (Section 4.5.3)
- “Qualified estimates” based on the professional judgment of a local official (Section 4.5.4)

Figure 4-3 illustrates the steps local officials need to take in order to determine market values. Additional guidance on estimating market value following disasters is provided in Chapter 7.

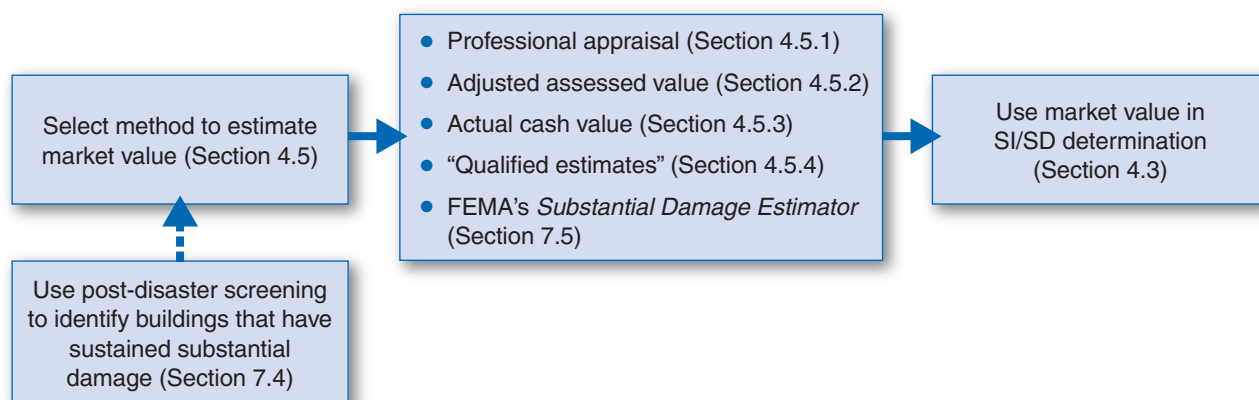


Figure 4-3. Determine the market value (overview)

4.5.1 Professional Property Appraisals

Property appraisals that are prepared by a professional appraiser according to standard practices of the profession are the most accurate and reliable method for determining market value. Professional appraisers should be qualified to appraise the type of property (e.g., residential, commercial, industrial) and should be licensed in the State or community in which the property is located. Most States require professional property appraisers to be licensed and to perform valuation work in accordance with the quality control standards found in the *Uniform Standards of Professional Appraisal Practice*, which are maintained and administered by The Appraisal Foundation (<http://www.appraisalfoundation.org>). In those States that require use of the standards, local officials should check that market value appraisals prepared to support SI/SD determinations have a statement regarding conformance with this standard.

Appraisal reports should identify intended users, including the property owner, who can then submit it as part of a permit application. In addition, the appraisal should be recent enough to reasonably reflect current market value as of the date of the permit application. When used to determine market value for damaged buildings, the appraisal must reflect the pre-damage condition. The “market approach” for determining market value works best if there are adequate market data and recent sales of comparable properties in the vicinity. Note that using the “income capitalization approach” is not acceptable because it is based on how the property is used, and not the value of structure alone. To separate the market value of a structure from the value of the land on which it is located, appraisers may need to do more research than is normally undertaken in order to reasonably allocate the total value between the structure and the land.

The following are situations where the local official may require the applicant to provide a professional appraisal to determine the market value of a structure:

- When it is written explicitly into the community’s floodplain management regulations or required by other local or State codes that independent appraisals shall be used for decisions related to non-conforming use permits.
- When the estimating methods that are used post-disaster (Section 7.4) yield a market value that indicates that the cost of proposed work closely approaches 50 percent of the structure’s estimated market value.
- When an applicant disagrees with the community’s SI/SD determination.

When a professional appraisal of market value is submitted, the local official is responsible for examining it to determine that it is reasonable for the specific characteristics of the building and to check that it does not include the value of land, land improvements (e.g., landscaping, paving), and accessory buildings. The market value of a non-residential building does not include the value of the use or occupancy. If there is cause to question the appraisal (for example, if it appears to overvalue the structure), the local official may request that another appraisal be provided.

4.5.2 Adjusted Assessed Value

Generally, assessed values or property assessments are determined by the State or local taxing or assessment authority. The assessor's job is to independently estimate the market value of real property. Assessments usually provide both land value and value of improvements, and are used as the basis for determining property taxes. Assessments are revised or adjusted periodically to account for changes in property values. The use of assessed value has some limitations that, if not considered and accounted for, can produce erroneous estimates of market value. These limitations are:

- **Appraisal cycle.** How often are the appraisals done and when was the date of the last appraisal? Market value estimates can be grossly outdated if the cycle is long and the property happens to be in the latter stage of its cycle and has not been appraised for many years.
- **Land values.** In most cases, land values and the value of improvements (structures) thereon will be assessed separately and listed as such in the tax records. In cases where they are not distinguished, a determination of the value of the land will have to be made and subtracted from the total assessed value.
- **Assessment level.** States and local taxing authorities vary in assessment levels (an established statutory ratio between the assessor's estimate of value and the true fair market value). For example, many States use an assessment level of 90 percent. In this case, the assessed values will underestimate market values by 10 percent. In cases where the assessment level is unacceptably low or where the projected ratio of cost of repair to market value is close to 50 percent, adjustments for assessment level must be made.

Local officials who elect to use assessed values for making SI/SD determinations should consult the authority that prepares the assessment values to understand the limitations on use of the data. Usually an adjustment factor is necessary because the assessed values cannot be used as a direct equivalent for current market value. The assessor's office should provide the adjustment factor that, when applied to assessed value, yields the "adjusted assessed value" that can then be used as an estimate of market value. A copy of the adjustment factor justification should be retained with the community's permanent records.

Adjusted assessed value may be used as a screening technique to separate out structures for which the ratio of repair or improvement costs to market value (adjusted assessed value) are obviously less than or greater than 50 percent. In post-disaster situations where no other market value estimates are available or where the number of permit applications is overwhelming, unadjusted assessed values may have to suffice as the definitive estimate of market value.

"Unadjusted assessed values" can be used to help local officials focus their efforts when large numbers of SD determinations must be made, such as after a disaster (Section 7.3.2).

An owner may appeal the use of assessed value, but the burden of proof can be placed on the applicant who can be required to submit an independent professional property appraisal that is prepared by a qualified appraiser.

4.5.3 Actual Cash Value

Actual cash value (ACV) is the cost to replace a building on the same parcel with a new building of like-kind and quality, minus depreciation due to age, use, and neglect. ACV does not consider loss in value simply due to outmoded design or location factors. The concept of ACV is used in both the insurance industry and the construction industry. In most situations, ACV is a reasonable approximation of market value.

A number of commercial sources of construction cost information are available to support estimating the replacement cost of a building, including industry-accepted guides available from companies such as RSMeans (<http://www.rsmeans.com>) and the Craftsman Book Company (<http://www.craftsman-book.com>), among others. These sources allow computation of construction costs based on occupancy, square footage, quality, and regional cost variations.

Depreciation accounts for the physical condition of a structure. Depreciation does not take into account functional obsolescence (e.g., outmoded design or construction that pre-dates current codes) or factors that are external to the structure (e.g., reputation of schools or distance to shopping and parks). Commercially available references provide tables and formulas to calculate physical depreciation. These tables and formulas are objective and are used by most professionals in the fields of property appraisal and building inspection. Local officials may consult with a qualified appraiser regarding depreciation, or additional guidance for applying depreciation rates over time is found in FEMA P-784 CD, *Substantial Damage Estimator* (Section 7.5).

4.5.4 Qualified Estimates

A “qualified estimate” of a structure’s market value is an estimate developed by a qualified local official who has sufficient experience and professional judgment on which to base such estimates. The local official may be in the building department or in the tax assessor’s office. The estimates should be made using the best available information, which may include recent permit records, recent home sales, regional cost data, estimates of depreciation based on knowledge of the pre-damage condition of buildings, and adjustments for unique or distinctive features of individual buildings. Another way that a local official may develop qualified estimates is if professional appraisals have been prepared for a few buildings; in that case, those results may be used to approximate the market values of similar buildings. This approach should be used only if the approaches described above cannot be used. Qualified estimates are most likely to be used in the post-disaster situation after large numbers of buildings have been damaged.

6 Factors to Consider and Illustrations of Substantial Improvement and Repair of Substantial Damage

6.1 Overview

This chapter describes the factors to be considered when evaluating permit applications for improvements and repairs to buildings and includes, in Section 6.4, illustrations of several types of improvements and repairs that could trigger SI/SD determinations. Section 6.3 describes all aspects of the NFIP floodplain management requirements that must be considered when bringing SI/SD buildings into compliance. Section 6.5 describes how certain types of buildings are addressed, including historic structures, manufactured homes, accessory structures, and certain agricultural structures. And finally, Section 6.6 explains the NFIP flood insurance implications related to SI/SD.

6.2 Factors to Consider When Evaluating Permit Applications for Improvements and Repairs

Several factors must be considered when local officials evaluate permit applications for repairs and improvements to buildings:

- Whether the building is pre-FIRM or post-FIRM (Section 6.2.1).
- Whether the building is in an A zone or a V zone (Section 6.2.2).
- Whether the building is located in more than one flood zone (Section 6.2.3).
- Whether the building is residential or non-residential (Section 6.2.4).
- The nature of the proposed repairs and improvements; Section 6.4 illustrates examples of various types of improvements and repairs and how they must meet NFIP requirements.

It is important to emphasize that all work must be included in an SI/SD determination. For example, if a small addition by itself is not a substantial improvement, but if other work on the building is undertaken at the same time, the combined work might be a substantial improvement (see Section 5.6.1).

6.2.1 Pre-FIRM or Post-FIRM

This chapter presents some examples of common improvements and repairs, along with descriptions of measures to comply with the NFIP floodplain management requirements. For purposes

of explaining these examples, this Desk Reference uses the terms “pre-FIRM” and “post-FIRM,” which are described below.

Buildings that were constructed before the date of a community’s flood hazard map are called “pre-FIRM” because they pre-date the initial FIRM. They are referred to as “existing construction” or existing buildings. They generally pre-date the date of the community’s first floodplain management regulations. Most flood-prone, pre-FIRM buildings were built by individuals who did not have sufficient knowledge of the hazard to make informed decisions about the flood risk. Thus, most pre-FIRM buildings were not built with specific measures that reduce exposure to flooding, such as elevating the floor a certain height above the flood level.

Buildings that were constructed after the date of the initial FIRM are called “post-FIRM.” These buildings were generally constructed after adoption of the community’s first floodplain management regulations and thus should have been built in compliance with the NFIP floodplain management requirements that were in effect at the time of construction.

A building constructed after the date of the initial FIRM is considered new construction (see definition in Chapter 3). All new construction must be built in accordance with the NFIP requirements. Regardless of the size or costs of improvements or repairs made to post-FIRM buildings, the building must remain fully compliant.

All subsequent work on a post-FIRM building must be performed in a manner that ensures the building’s continued compliance. Work shall not be allowed if it would make the building non-compliant with the floodplain management requirements that had to be met when the building was constructed.

In summary, how proposals to make improvements or repairs must be evaluated as a function of whether buildings are pre-FIRM or post-FIRM is as follows:

- If a building is pre-FIRM, any proposed improvements or repairs must be evaluated to determine whether the work is a substantial improvement or repair of substantial damage.
- If a building is post-FIRM, any proposed improvements or repairs must be evaluated to ensure that the improvements or repairs comply with the applicable NFIP floodplain management requirements and to ensure that the improvements or repairs do not alter any aspect of the building that would make it non-compliant.

6.2.2 A Zone or V Zone

The term “A zone” includes all zones shown on FIRMs as Zones A, AE, A1-A30, AR, AO, A99, and AH. A zones are shown along riverine bodies of water and along tidally-influenced bodies of water, typically inland of V zones. V zones are flood hazard areas with high velocity wave action where wave heights of 3 feet or more are anticipated. The term “V zone” includes all zones shown on FIRMs as Zones V, VE, and V1-V30. The basic NFIP floodplain management requirements for the design and construction of buildings in A zones and V zones differ somewhat. Some of the key differences are:

- A zone: the lowest floor, including basement, is elevated to or above the BFE.
- V zone: the bottom of the lowest horizontal structural member of the lowest floor is elevated to or above the BFE.

- A zone: enclosures below elevated buildings must have flood openings.
- V zone: the areas below elevated buildings are either free-of-obstructions or enclosed with insect screening, latticework, or breakaway walls.
- A zone: non-residential buildings may be dry floodproofed.
- V zone: dry floodproofing is not allowed for non-residential buildings.
- V zone: new buildings must be located landward of the reach of the mean high tide.

6.2.3 More Than One Flood Zone

Buildings that are located in more than one zone must comply with the requirements of the more restrictive zone. For example, a building that is a substantial improvement that is in both a V zone and an A zone must be designed and constructed to meet the V zone requirements. In riverine A zones, similar situations may occur. A building that is affected by more than one BFE must be elevated to the higher BFE, and a floodway analysis is required even if only a portion of a building encroaches into the floodway.

6.2.4 Residential or Non-Residential

As noted in Section 6.2.2, the requirements for non-residential buildings vary depending on flood zone. In A zones, non-residential buildings may be elevated or dry floodproofed. Section 6.4.1 describes dry floodproofing as a possible method of protecting non-residential buildings in A zones that are substantially improved or substantially damaged. In V zones, substantially-improved non-residential buildings must have the bottom of the lowest horizontal structural member of the lowest floor elevated to or above the BFE.

6.3 Bringing Substantially Improved and Substantially Damaged Buildings into Compliance

If a local official determines that improvements or repairs to a building constitute SI/SD, then the building must be brought into compliance with the NFIP floodplain management requirements for new construction in SFHAs. The key aspects of the NFIP requirements for new construction and SI/SD include:

- Lowest floor elevations (Section 6.3.1)
- Enclosures (Section 6.3.2)
- Basements (Section 6.3.3)
- Utility and building service equipment (Section 6.3.4)
- Flood damage-resistant materials (Section 6.3.5)
- Making buildings reasonably safe from flooding (Section 6.3.6)

For several reasons, owners may decide to demolish existing buildings. If a property owner chooses to construct a new building on the same site, the work is treated as new construction and all requirements for new construction must be met.

The sections below describe these requirements. The examples given below each NFIP requirement describe measures that can be used to bring SI/SD buildings into compliance. These examples are not an exhaustive list of possible ways to meet the NFIP requirements.

6.3.1 Lowest Floor Elevations

For SI/SD buildings that have lowest floors below the BFE, the lowest floor must be elevated to bring the buildings into compliance. In A zones, the lowest floor must be at or above the BFE (non-residential buildings may be dry floodproofed to or above the BFE), and in V zones, the bottom of the lowest horizontal structural member of the lowest floor must be at or above the BFE.

Measures to bring a building into compliance may include meeting a combination of requirements. For example, elevating a building on a new foundation may also require reinforcing the continuous load path and filling in below-grade areas.

There are several solutions that can achieve compliance. The solution selected for any given building will depend on several factors such as flood zone, the type of foundation, feasibility, and whether the building is residential or non-residential.

Below are examples of measures that can be taken to meet NFIP requirement to bring SI/SD buildings into compliance:

■ **Elevation-in-place (A and V zones).** This measure involves detaching the building from its foundation and raising it onto a compliant foundation. Elevation-in-place is most effective for buildings that are on crawlspaces, pilings, or columns. Buildings with basements also may be elevated (see Section 6.3.3 for measures to bring basements into compliance). Slab-on-grade buildings have been elevated-in-place, although the process is more complicated and costly (these buildings may be better candidates for conversion of the ground level to become a compliant enclosure, described below).

An easy-to-read publication that illustrates three elevation options is *Above the Flood: Elevating Your Floodprone House* (FEMA 347).

A more technical document that describes additional options is *Engineering Principles and Practices for Retrofitting Flood-Prone Residential Structures* (FEMA 259).

■ **Conversion of the ground level to a compliant enclosure (typically in A zones).** There are instances, typically in A zones, where the first (ground) floor is subject to flooding, but the next higher floor is above the BFE. In these cases, it may be feasible to modify the ground level so that it becomes an enclosure that complies with the NFIP requirements. (This option is unlikely to be applied in V zones because the vertical structural members (piers, pilings, or columns) of older buildings rarely extend high enough.) This option requires that the structure meet all applicable NFIP requirements, including limitations on use of enclosures (parking of vehicles, building access, and storage). Because owners lose living area, conversions usually are combined with the addition of an upper story or an elevated lateral addition (Section 6.4.2).

■ **Extend walls upward and raise the floor (A zones only).** This measure leaves the building on its original slab-on-grade foundation. To achieve the necessary elevation of the lowest floor, the roof is removed and the walls are extended high enough to allow a new floor system to

be constructed on top of the slab, with the new floor surface at or above the BFE. The work also may require the windows and doors to be shifted upward. In addition to replacing the roof, the work also involves retrofitting the newly-created “crawl space” or under-floor space (the space between the original slab and the new floor) to be a compliant enclosure by installing flood openings. In some cases, rather than adding a new floor system, it may be feasible to simply add sufficient thickness to the slab to raise the floor surface to or above the BFE.

- **Conversion of walkout basement to a compliant enclosure (A zones only).** This measure is particularly appealing if the elevation of the floor above the walkout basement is at or above the BFE. If that is the case, converting the walkout basement to a compliant enclosure can be done by limiting the use of the area to parking of vehicles, building access, or storage; removing finish materials; retrofitting the enclosure walls with flood openings; and elevating equipment and utility service. To prevent the enclosure from being a basement as defined by the NFIP, particular attention must be paid to ensuring that the enclosure has at least one side that is at or above grade, which may require lowering the ground surface by re-grading along one or more of the exterior foundation walls.
- **Dry floodproofing modifications (A zone only, non-residential only).** Dry floodproofing measures must be designed and certified by a qualified registered professional engineer or architect. Designers must consider many factors when determining whether a building can be dry floodproofed, including the strength of the building, whether it will be subject to buoyancy once it is made watertight, whether all possible paths for water to enter the building can be properly sealed (floor drains, plumbing fixtures, openings through exterior walls through which utility service is provided, etc.), and whether there is adequate warning time if human intervention is necessary (e.g., to install barriers or closing valves). For guidance, see ASCE 24-05, *Flood Resistant Design and Construction* and FEMA FIA-Technical Bulletin 3, *Non-Residential Floodproofing – Requirements and Certification for Buildings Located in Special Flood Hazard Areas*.

6.3.2 Enclosures

The NFIP regulations allow enclosed areas below elevated buildings provided the enclosures meet certain requirements. The NFIP regulations for enclosures under buildings in A zones are in 44 CFR § 60.3(c)(5), and in § 60.3(e)(5) for enclosures under buildings in V zones. Requirements in these sections include:

- **Limited use.** In all flood zones, the use of enclosures must be limited to parking of vehicles, building access, and storage. Crawlspace are treated as enclosures.
- **Flood damage-resistant materials.** All construction materials used below the BFE must be flood damage-resistant materials (see FEMA Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas*). Materials necessary to meet fire protection code requirements are acceptable.
- **Elevated or protected utility equipment and service.** Given the limitations on use, only the minimum utility equipment and service connections necessary should be located in enclosures under elevated buildings.

- **Flood openings.** In A zones, the walls of enclosed areas must have flood openings to allow for the automatic entry and exit of floodwaters to minimize the potential for damage caused by hydrostatic pressure (see FEMA Technical Bulletin 1, *Openings in Foundation Walls and Walls of Enclosures Below Elevated Buildings in Special Flood Hazard Areas*).
- **Breakaway walls.** In V zones, the walls of enclosed areas must be non-supporting breakaway walls (see FEMA Technical Bulletin 9, *Design and Construction Guidance for Breakaway Walls Below Elevated Buildings Located in Coastal High Hazard Areas*).

6.3.3 Basements

Under the NFIP, new buildings and substantially improved buildings must have their lowest floors (including basements) elevated to or above the BFE (non-residential buildings may have dry-floodproofed basements below the BFE). The NFIP regulations define a basement as “any area of the building having its floor subgrade (below ground level) on all sides.” If a local official determines that work constitutes SI/SD of any building that has a basement, the building must be brought into compliance, which includes eliminating the below-grade area.

Measures to eliminate basements below the BFE will, in part, depend on the nature of the basement and surrounding ground elevations. Below are examples of measures that can be taken to meet the requirement:

- **Fill in below-grade areas.** This option is effective only if the elevation of the floor above the below-grade area is at or above the BFE. Compliance is achieved by filling in the below-grade area and converting the remaining headroom to a compliant enclosure.
- **Convert walkout basements to compliant enclosures.** Section 6.3.1 describes how a walkout basement can be modified to become a compliant enclosure (A zone only).
- **Floodproof below-grade areas (A zone, non-residential only).** The NFIP regulations allow non-residential buildings in A zones to have areas that are below-grade on all sides (basements) only if the areas are dry floodproofed. Careful evaluation of the structural integrity of a building must be undertaken to determine if dry floodproofing measures are feasible. For guidance, see FEMA FIA-Technical Bulletin 3, *Non-Residential Floodproofing – Requirements and Certification for Buildings Located in Special Flood Hazard Areas*.

6.3.4 Utility and Building Service Equipment

The NFIP requires that new buildings and substantially improved buildings have utilities, equipment, and appliances elevated to or above the BFE, or be designed to prevent water from entering or accumulating within the equipment components (see 44 CFR § 60.3(a)(3) provided in Section 3.3). This means that SI/SD buildings with utility and building service equipment that is below the BFE must have the equipment either elevated or replaced with components that are designed and installed to be flood damage-resistant. Minimal electric service is allowed below the BFE if it is required to address life safety and electric code requirements for building access and storage.

Below are examples of measures that can be taken to meet NFIP requirements for utility and service equipment:

- **Relocate to elevated areas.** Equipment and utility service must be relocated or elevated when buildings are elevated-in-place or if ground floors are converted to compliant enclosures. When a basement is eliminated, any equipment that was in the basement will be relocated to the elevated portion of the building or to an elevated addition.
- **Elevate on outside platforms.** Equipment located outside of the building, such as heat pumps and air conditioning units, must be elevated on platforms at or above the BFE. Platforms may be independently supported or cantilevered from the foundation.
- **Elevate on platforms inside enclosures.** If a substantially improved building in an A zone has a compliant enclosure, utility equipment (e.g., water heaters, water treatment systems, and heat pumps) may be installed on platforms that raise the equipment to or above the BFE. Note that appliances such as washers, dryers, and freezers should not be installed in enclosures (even if elevated) because they are not compatible with the allowable uses (parking of vehicles, building access, and storage) and they do not meet the mechanical service equipment requirement at 44 CFR § 60.3(a)(3).
- **Provide component protection.** Equipment that must be located on the floor of a compliant enclosure in an A zone may be protected with a barrier to keep water away from the equipment. Typical barriers are constructed of masonry or concrete to a height that is equal to or higher than the BFE and have specially designed doors or panels that are put in place to keep water from entering. This approach is feasible in non-residential buildings provided there is sufficient warning time.

More detail on compliant installations can be found in *Protecting Building Utilities from Flood Damage: Principles and Practices for the Design and Construction of Flood Resistant Building Utility Systems* (FEMA 348).

6.3.5 Flood Damage-Resistant Materials

The NFIP requires that flood damage-resistant materials be used below the BFE. If a building will be elevated-in-place, materials used below the BFE must meet this requirement, including materials used to build an enclosure. For guidance on materials, see FEMA Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas*.

Minimal use of certain materials that are not flood damage-resistant materials is allowed below the BFE if specifically required to address life safety and electric code requirements for building access and storage areas.

6.3.6 Making Buildings Reasonably Safe from Flooding

In all flood zones, substantially improved buildings must be “adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy” (see 44 CFR § 60.3(a)(3)(i) provided in Section 3.3). In addition, in V zones structures must be “anchored to resist flotation, collapse,

and lateral movement due to the effects of wind and water loads acting simultaneously on all building components” (see 44 CFR § 60.3(e)(4)(ii) provided in Section 3.3). The compliance solution selected for any given building will depend on several factors such as the flood zone in which it is located, the type of foundation, and whether the building is residential or non-residential.

Below are examples of measures that can be taken to meet the NFIP requirement that buildings be reasonably safe from flooding:

- **Continuous load path.** Provide for a continuous load path by connecting the building to the foundation and connecting the roof to the walls. If existing connectors (bolts, nails, screws, straps, etc.) that attach the building to the foundation are inadequate, they should be replaced, reinforced, or augmented to address the requirement that the building be stable under base flood conditions.
- **Foundation bracing.** Pile- or post-supported buildings may require additional bracing. In V zones, bracing that is perpendicular to the approach of waves is an obstacle to the passage of waves and water under the building, and may need to be modified to meet the NFIP requirement to be “free-of-obstruction.”

Work that does not require a permit is generally considered to be repairs of normal wear and tear or routine maintenance. Property owners or contractors should check with local officials to determine when work requires a permit.

Once the requirement for a permit is triggered, all work is to be included in the SI/SD determination, even work that would otherwise not require a permit.

6.4 Illustrations of Improvements and Repairs

The following sections and Tables 6-1a and 6-1b present some examples of common improvements and repairs, along with descriptions of measures to comply with the NFIP floodplain management requirements. Several of the examples describe and illustrate a specific type of work or combinations of work that may trigger the SI/SD requirements. Examples are also given of improvements and repairs to pre-FIRM and post-FIRM buildings and what must be done to comply with the new construction requirements of the NFIP. Examples of work include:

- Rehabilitation and remodeling (Section 6.4.1)
- Lateral additions (Section 6.4.2)
- Vertical additions (Section 6.4.3)
- Repair, reinforce, or replace foundations (Section 6.4.4)
- Repair of damaged buildings (Section 6.4.5)
- Reconstruction of demolished or destroyed buildings (Section 6.4.6)
- Work on post-FIRM buildings (Section 6.4.7)
- Work on buildings where flood maps have been revised (Section 6.4.8)

Table 6-1a. Compliance Matrix (A Zones)

Types of Work	Building is Pre-FIRM	Building is Post-FIRM
Rehabilitation (renovate or remodel), <u>not</u> SI	Compliance not required	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance
Rehabilitation (renovate or remodel), SI	Building required to comply	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance (see Note below table)
Lateral addition and Rehabilitation, SI	Addition required to comply; building required to comply	Addition required to comply; building required to comply (see Note below table)
Lateral addition, <u>not</u> SI	Addition not required to comply	Addition required to be elevated to at least the elevation of the existing lowest floor
Lateral addition, SI, <u>not</u> structurally connected	Addition required to comply; building not required to comply	Addition required to comply
Lateral addition, SI, structurally connected	Addition required to comply; building required to comply	Addition required to comply; building required to comply (see Note below table)
Vertical addition above building, <u>not</u> SI	Compliance not required	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance
Vertical addition above building, SI	Building required to comply	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance (see Note below table)
Repair foundation, <u>not</u> SI	Compliance not required	Repairs shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance
Repair foundation, SI	Building required to comply	Building required to comply (see Note below table)
Replace/extend foundation, SI (including "elevate-in-place")	Building required to comply	Building required to comply (see Note below table)
Repair damage, SD	Building required to comply	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance (see Note below table)
Reconstruct new building on existing or new foundation, SI	Reconstructed building required to comply	Reconstructed building required to comply (see Note below table)

Note: If a map revision has resulted in a higher BFE, a post-FIRM building must comply based on the new BFE.

Table 6-1b. Compliance Matrix (V Zones)

Types of Work	Building is Pre-FIRM	Building is Post-FIRM
Rehabilitation (renovate or remodel), <u>not</u> SI	Compliance not required	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance
Rehabilitation (renovate or remodel), SI	Building required to comply	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance (see Note below table)
Lateral addition and Rehabilitation, SI	Addition required to comply; building required to comply	Addition required to comply, and rehabilitation work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance (see Note below table)
Lateral addition, <u>not</u> SI	Addition not required to comply	Addition required to comply
Lateral addition, SI, <u>not</u> structurally connected	Addition required to comply; building required to comply	Addition required to comply (see Note below)
Lateral addition, SI, structurally connected	Addition required to comply; building required to comply	Addition required to comply; building required to comply (see Note below table)
Vertical addition above building, <u>not</u> SI	Compliance not required	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance
Vertical addition above building, SI	Building required to comply	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance (see Note below table)
Repair foundation, <u>not</u> SI	Compliance not required	Repairs shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance
Repair foundation, SI	Building required to comply	Building required to comply (see Note below table)
Replace/extend foundation, SI (including "elevate-in-place")	Building required to comply	Building required to comply (see Note below table)
Repair damage, SD	Building required to comply	Work shall comply and shall not be allowed to make the building non-compliant with any aspect of the building that was required for compliance (see Note below table)
Reconstruct new building on existing or new foundation, SI	Reconstructed building required to comply	Reconstructed building required to comply (see Note below table)

Note: If a map revision has resulted in a higher BFE, a post-FIRM building must comply based on the new BFE.

6.4.1 Rehabilitation and Remodeling

The NFIP considers rehabilitation and remodeling to include improvements to a building that do not affect the external dimensions nor expand the total area of the building. Rehabilitation may or may not involve structural modification of the building. The local official must review all work proposed for rehabilitation or remodeling to determine whether it constitutes a

substantial improvement. If the work constitutes a substantial improvement, the building must be brought into compliance.

Rehabilitation of pre-FIRM buildings (residential)

Residential buildings that are substantially improved through rehabilitation or remodeling must comply with all applicable NFIP floodplain management requirements for the specific flood zone. Figure 6-1 illustrates the rehabilitation of a residential building that is located in an A zone. The figure illustrates elevation on a solid perimeter wall (crawlspace). Other types of foundations may be used in A zones, including pilings, columns, slabs on fill, and stem walls. Open foundations (pilings and columns) are required in V zones.

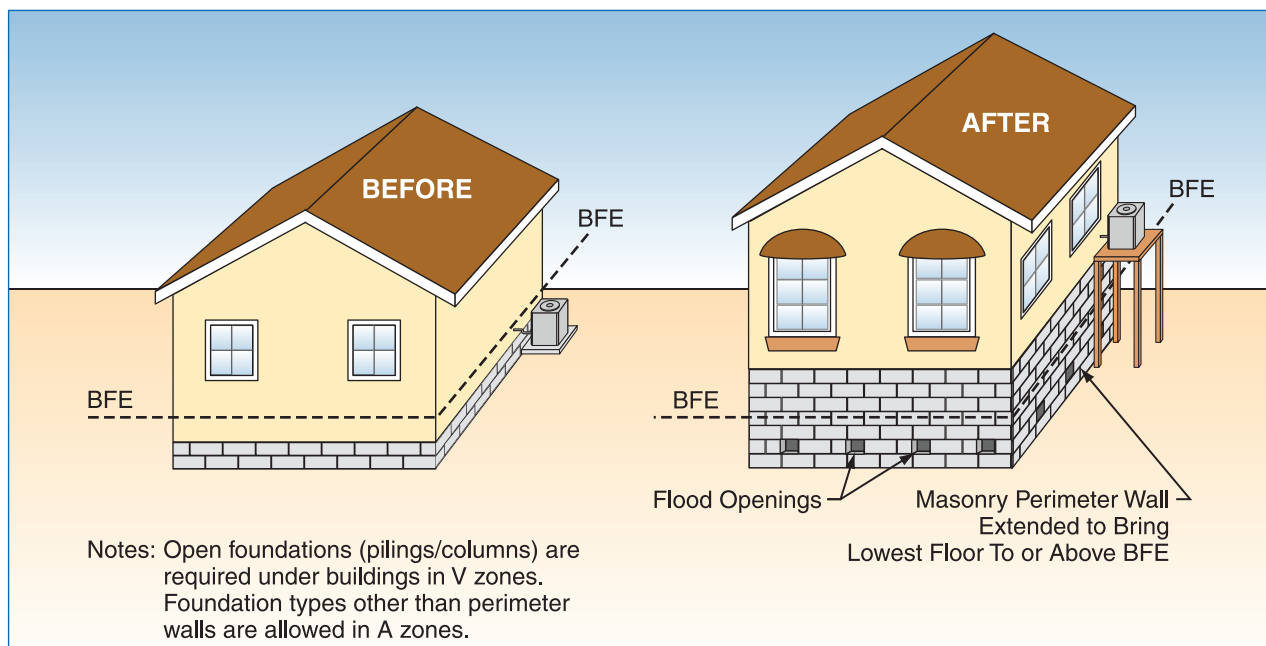


Figure 6-1. Rehabilitation or remodel (no increase in footprint) of residential building in an A zone – the proposed work was determined to be a substantial improvement. The building is brought into compliance by elevating it on an extended perimeter foundation wall, installing flood openings, and raising the HVAC equipment onto a platform.

Rehabilitation of pre-FIRM buildings (non-residential)

Rehabilitation or remodeling work on a non-residential building that is SI/SD triggers the requirement that the lowest floor be elevated (in A and V zones) or dry floodproofed (only in A zones).

Figure 6-2 illustrates the rehabilitation of a non-residential structure in an A zone where a structural engineering analysis indicates the building can be retrofitted with dry floodproofing measures in compliance with the NFIP requirements that require certification of the design by a registered design professional. For additional guidance, see FEMA FIA-Technical Bulletin 3, *Non-Residential Floodproofing – Requirements and Certification for Buildings Located in Special Flood Hazard Areas*. Communities that enforce building codes that refer to ASCE 24-05 for design and construction of buildings in flood hazard areas should be aware that ASCE 24-05 establishes

some specific limitations for floodproofing, including limitations on warning time and the availability of adequate labor to implement floodproofing measures.

Depending on the type of foundation and other constraints, non-residential structures that are located in A zones may be elevated on raised foundations. In this instance, the building must be brought into compliance with all of the applicable floodplain management requirements, including the type of foundation, limitations on use of enclosed areas, installation of openings in any enclosed areas, elevation of utilities and mechanical equipment, and use of flood damage-resistant materials.

In V zones, the only compliance option for non-residential buildings is elevation on open foundations. Dry floodproofing is not allowed in V zones.

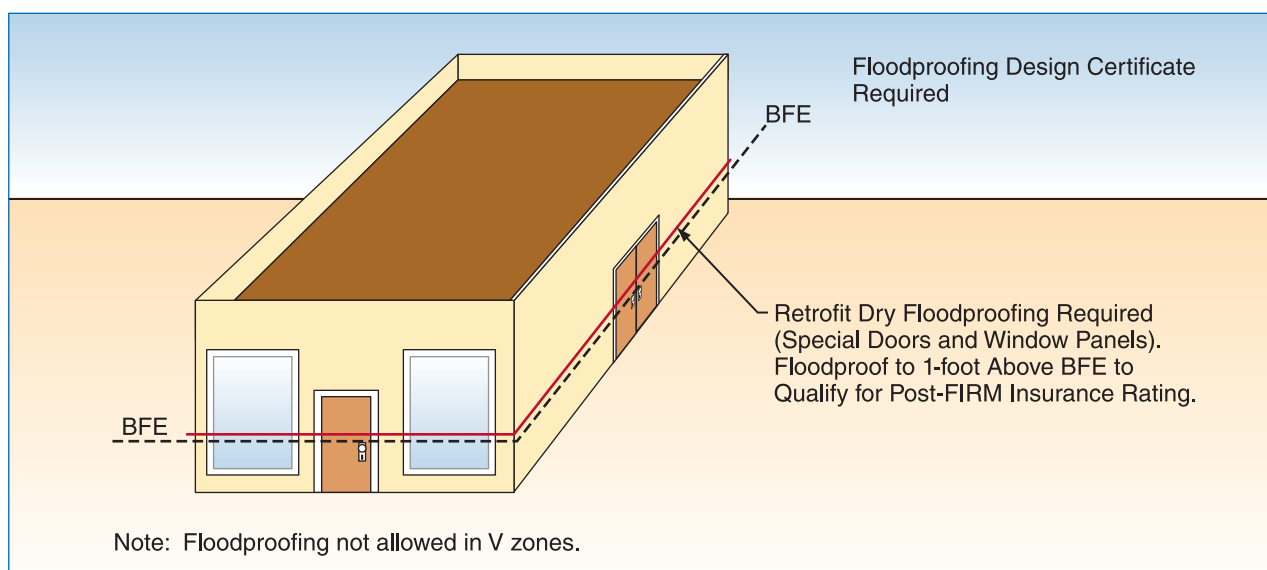


Figure 6-2. Rehabilitation or remodel (no increase in footprint) of non-residential building in an A zone – the proposed work was determined to be a substantial improvement. The building is brought into compliance by retrofit dry floodproofing measures (certification of design by registered design professional is required).

Rehabilitation/repair of a post-FIRM building

Any repairs or improvements associated with the rehabilitation or remodeling of a post-FIRM building must comply with the NFIP requirements and not alter the building in any way that violates those requirements.

If a revised, higher BFE goes into effect and the local official determines that rehabilitation constitutes SI/SD, the entire post-FIRM building must be brought into compliance with the elevation requirement based on the revised BFE.

6.4.2 Lateral Additions

A lateral addition expands the floor area of the building. A lateral addition that involves no alteration of the load-bearing structure of the building, is attached to the building with minimal

connection, and that has a doorway as the only modification to the common wall is considered to be “not structurally connected.” A lateral addition that has its load-bearing structure connected to the load-bearing structure of the base building, which typically involves significant alternation of the common wall, is considered “structurally connected.”

If a lateral addition is proposed along with other work on the original building, all the work must be considered in the SI/SD determination, regardless of the size or cost of the addition by itself and the cost of improvements to the original building.

As described below and summarized in Tables 6-1a and 6-1b, lateral additions depend on four factors:

- Whether the building is pre-FIRM or post-FIRM,
- Whether the common wall with the original building is modified structurally by more than installing a doorway,
- Whether the addition itself is a substantial improvement, and
- The applicable flood zone.

Structurally Connected and Not Structurally Connected. A non-compliant addition that is below the BFE and “structurally connected” would transfer flood loads imposed on it to the existing building.

An addition that is below the BFE and “not structurally connected” is expected to sustain damage, but should not transfer loads to the existing building.

Lateral additions to pre-FIRM buildings (A zone, residential)

For a project that involves only a lateral addition (i.e., there will be no improvements to the original building, the addition will not be structurally connected to the original building, and only a doorway will be installed in the common wall between the addition and the original building):

- If the cost of the addition compared to the value of the original building constitutes a substantial improvement, only the lowest floor of the addition must be elevated to comply with NFIP requirements (Figure 6-3).
- If the addition is determined to not be substantial improvement, the addition is not required to be elevated. Owners should be reminded that the addition will be subject to flooding and encouraged to consider measures to reduce vulnerability to damage (Section 5.8).

If a proposed lateral addition project also includes rehabilitation or remodeling of the existing building, then the local official must consider the whole project as a combination of work. If the local official determines that the combined cost of the project constitutes substantial improvement, then both the original building and the addition must be elevated and meet all other applicable requirements (Figure 6-4).

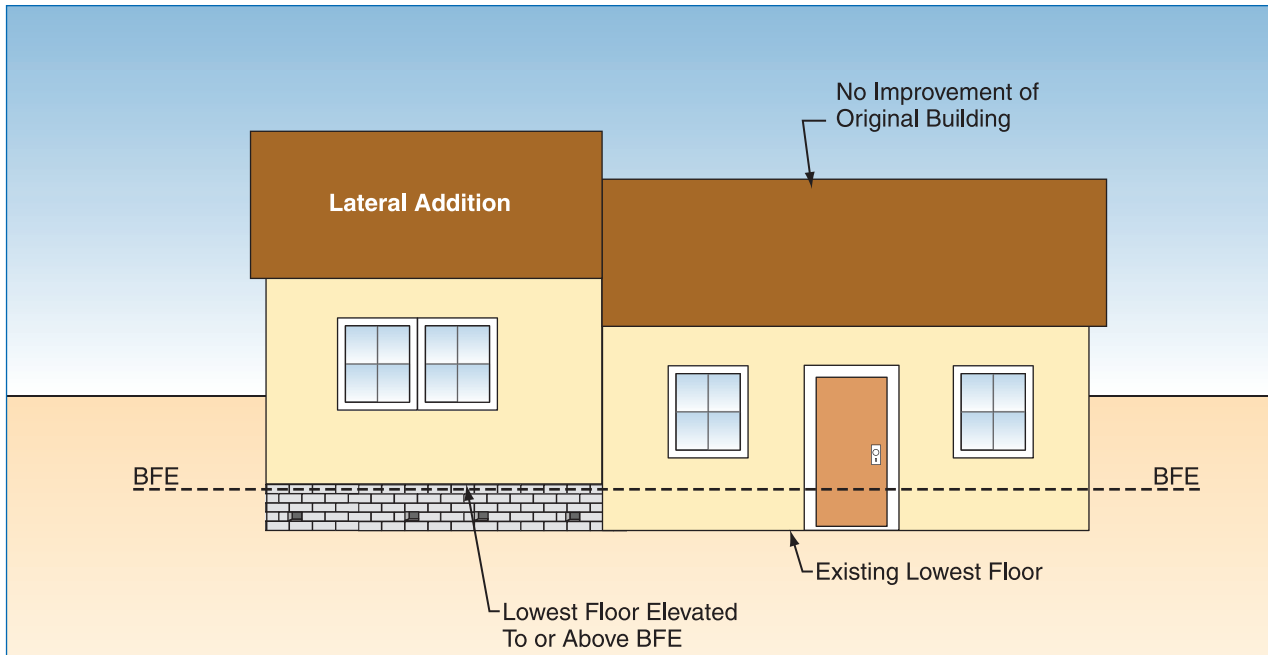


Figure 6-3. Lateral addition to a pre-FIRM building in an A zone – the proposed work is only the addition (no work was performed on the original building and no structural modification was made to the common wall or roof). The addition constitutes a substantial improvement and it complies with all NFIP requirements.

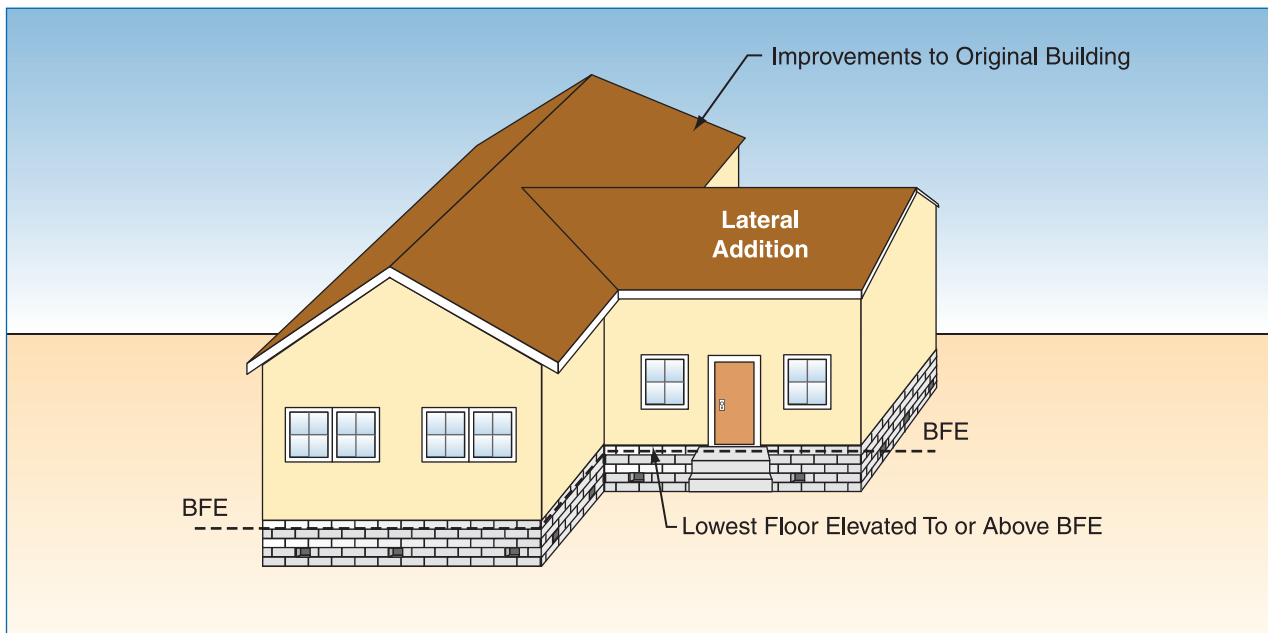


Figure 6-4. Lateral addition to a pre-FIRM building in an A zone – the proposed work includes an addition and work on the original building, including structural modification of the common wall or roof. The proposed work was determined to be a substantial improvement. The addition complies with all requirements and the building is brought into compliance by elevating it on a compliant foundation.

Lateral additions to pre-FIRM buildings (V zone, residential)

Lateral additions to pre-FIRM buildings in V zones are treated differently than additions to buildings in A zones. If a proposed addition (or combination of an addition and other improvements) to a V zone building constitutes a substantial improvement, then the lowest floor of both the original building and the addition must be elevated (Figure 6-5). The pertinent NFIP requirement for elevating both is the “free of obstruction” requirement. The original building must be elevated so that it will not obstruct floodwaters and waves that may damage the addition. For more guidance, see FEMA Technical Bulletin 5, *Free-of-Obstruction Requirements for Buildings Located in Coastal High Hazard Areas*.

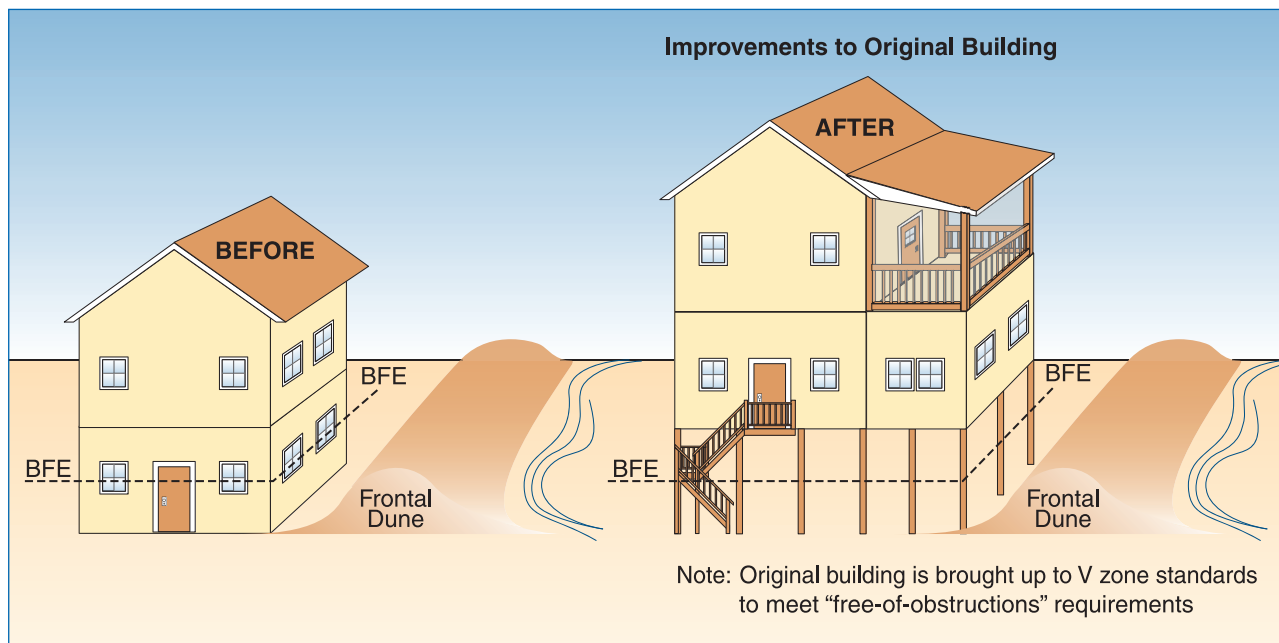


Figure 6-5. Lateral addition to a residential building in a V zone – the proposed work includes work on the original building. The lateral addition and improvements constitute substantial improvement. Both the addition and the original building are brought into compliance by elevating to or above the BFE on an open foundation.

Lateral additions to pre-FIRM manufactured homes

Lateral additions are common improvements to manufactured homes and local officials must determine whether the proposed work constitutes substantial improvement. Costs associated with typical porches and sunrooms may not exceed 50 percent of the market value of the home. However, proposed additions that will be walled with siding, insulated, and used year-round require close examination to determine whether the addition constitutes a substantial improvement.

If a proposed addition to a manufactured home constitutes a substantial improvement, the local official must determine the applicable NFIP elevation requirements; the requirements depend on several factors that are described in Section 6.5.2.

Figure 6-6 illustrates a lateral addition to a pre-FIRM manufactured home – the proposed work includes improvements to the existing home. The existing home in this illustration is located outside a manufactured home park or subdivision and the work constitutes a substantial improvement. Both the addition and the home must be elevated on compliant foundations.

All substantial improvements must be carefully constructed, supported, and anchored to resist flotation, collapse, and lateral movement during base flood conditions so as not to impose unanticipated loads on the original homes. Otherwise, the presence of additions could increase vulnerability to flood loads imposed on supporting piers and anchoring, leading to damage. For more detailed guidance on the installation of manufactured homes in SFHAs, see FEMA P-85, *Protecting Manufactured Homes from Floods and Other Hazards: A Multi-Hazard Foundation and Installation Guide*.

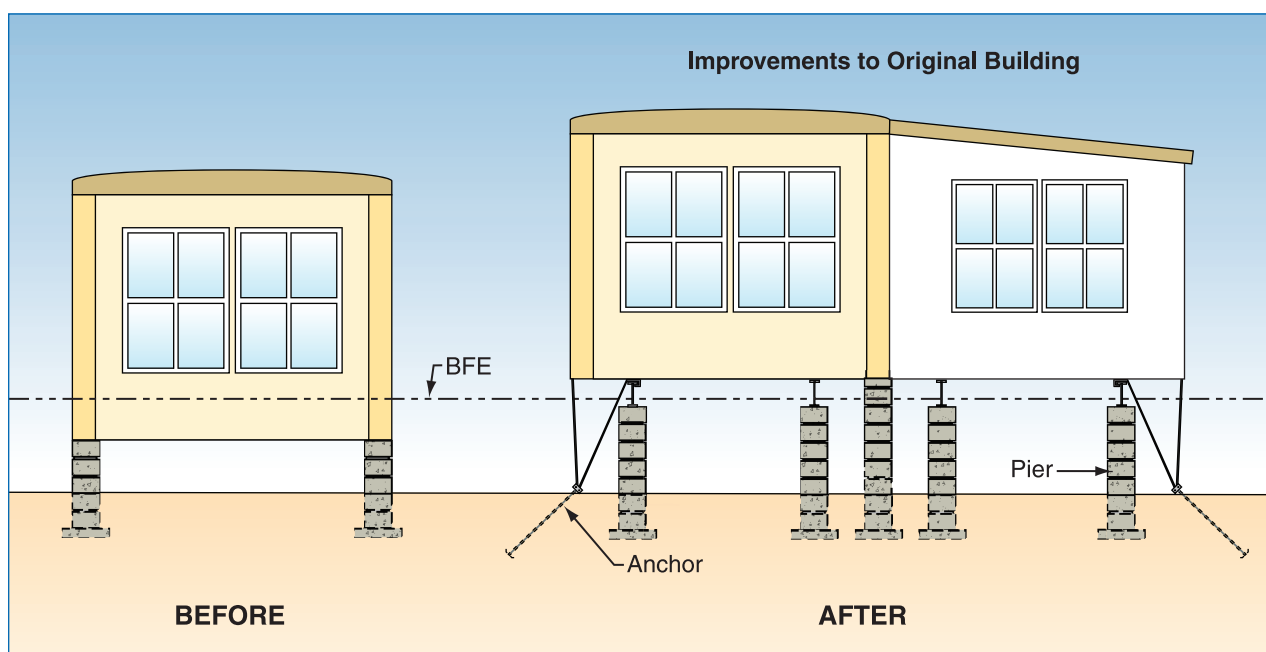


Figure 6-6. Lateral addition to a pre-FIRM manufactured home in an A zone – the proposed work includes improvements to the existing home. The work constitutes substantial improvement. The addition and the home are elevated to or above the BFE.

Lateral additions to pre-FIRM buildings (A zone, non-residential)

If a proposed lateral addition to a non-residential building is determined to be a substantial improvement, but there is no work proposed for the original building and the common wall is modified only by the installation of a door, only the addition must be brought into compliance. The addition must meet NFIP requirements either by elevating the lowest floor to or above the BFE or by dry floodproofing to that elevation (Figure 6-7). If the addition is dry floodproofed, the common wall must also be made watertight.

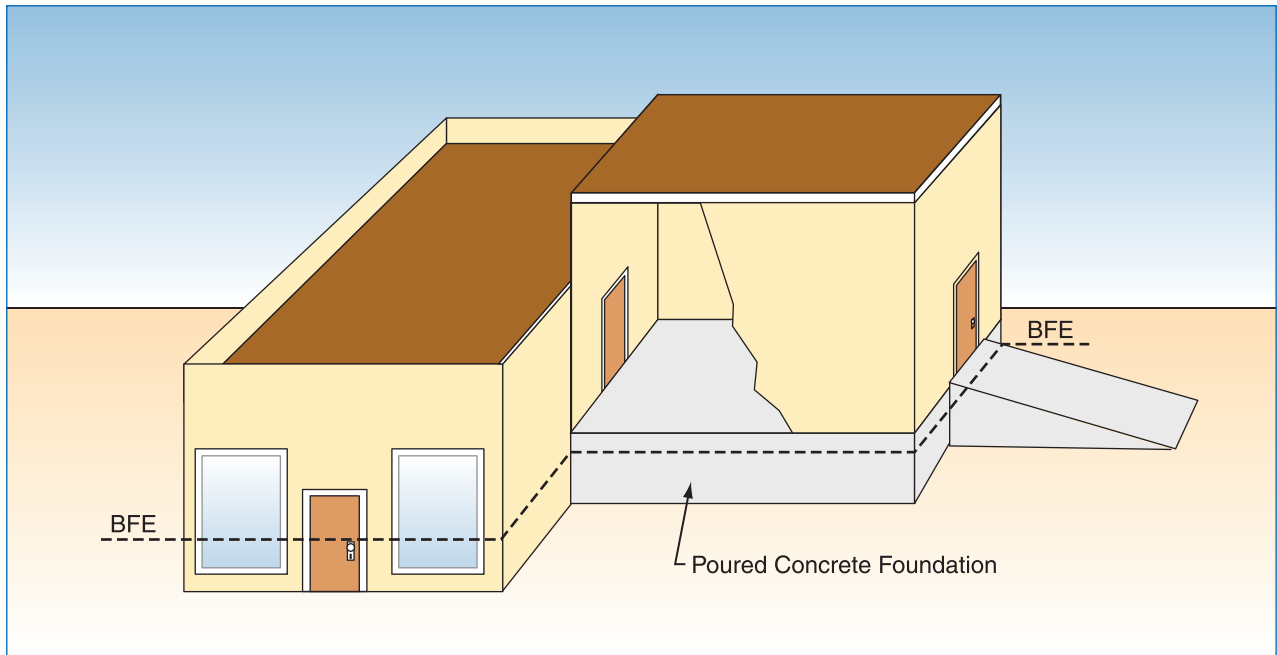


Figure 6-7. Lateral addition to a non-residential building in an A zone – the proposed work is only the addition (no work on the existing building and no structural modification of the common wall or roof). The work constitutes substantial improvement. The addition is elevated to or above the BFE (an alternative would be to dry floodproof only the addition, including the common wall).

Lateral additions to post-FIRM buildings (any zone, residential or non-residential)

Lateral additions to post-FIRM buildings are new construction and must comply with the NFIP requirements, including elevation. If the addition does not comply, then the original building will become non-compliant. Lateral additions must not alter any aspect of the building that had to be met when the building was constructed in compliance with the community's floodplain management regulations. A lateral addition, regardless of its value or size, must be elevated to at least the height of the post-FIRM building. The following summarizes these points:

- In any zone, if the BFE is unchanged, the addition must be elevated and comply with other applicable NFIP requirements, regardless of whether it is SI/SD (Figure 6-8).
- In any zone, if a revised, higher BFE is in effect, a lateral addition that is not a substantial improvement must be elevated at least as high as the original building.
- In any zone, if a lateral addition is a substantial improvement (and structurally connected), both the addition and the building must be brought into compliance. If a revised, higher BFE is in effect, both the original building and the addition must be elevated.
- In A zones, if the lateral addition is a substantial improvement (and not structurally connected), it must be elevated to the effective BFE. The effective BFE may be higher than the BFE in effect when the building was built (Figure 6-9).
- In V zones, if a lateral addition is a substantial improvement (and not structurally connected), both the addition and the original post-FIRM building must be elevated if a revised, higher BFE is in effect, otherwise the free-of-obstruction requirement is not met.

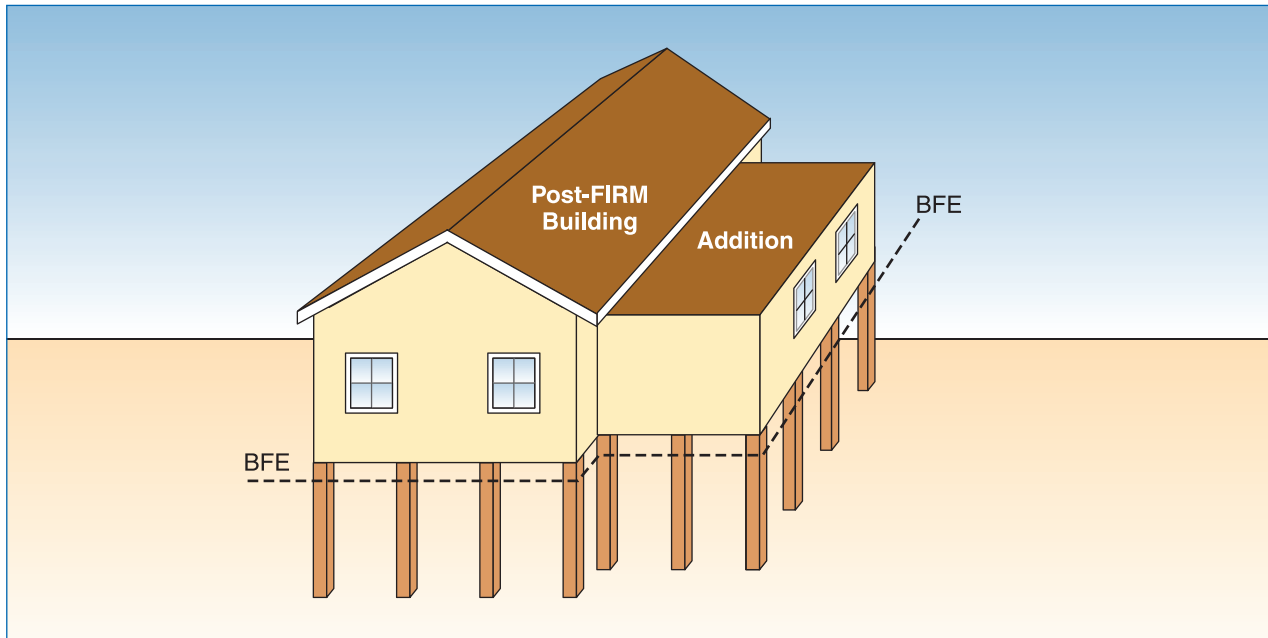


Figure 6-8. Lateral addition to a post-FIRM building in any flood zone (map revision has not changed the effective BFE). All improvements or repairs to a post-FIRM building must comply with the NFIP requirements regardless of the value of that work, and the work shall not compromise any of the NFIP requirements that the building was required to meet when it was initially built.

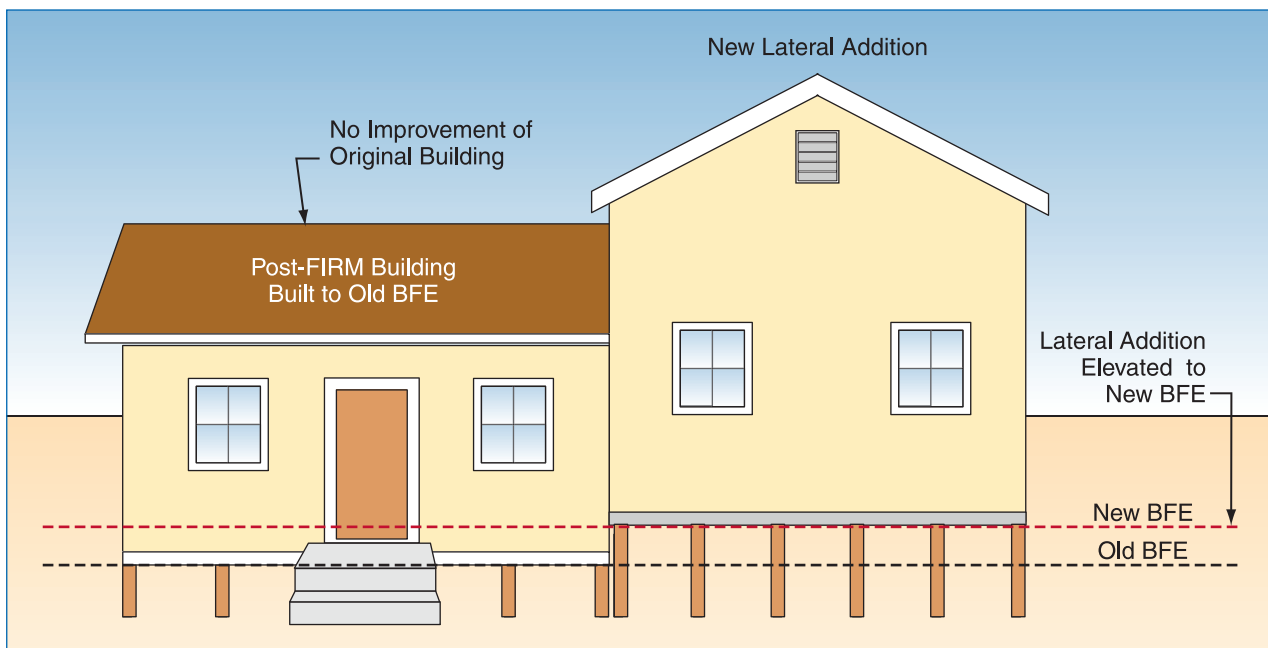


Figure 6-9. Lateral addition to a post-FIRM building in an A zone (a map revision has increased the BFE). The proposed work is a lateral addition with no work in the original building and no structural modification of the common wall or roof. The work constitutes a substantial improvement. Because there is no structural modification, only the addition must comply with the effective BFE which is higher than the BFE when the building was built. If instead the proposed work includes work in the original building or structural modification, the addition and the building must comply with the effective BFE.

6.4.3 Vertical Additions

A vertical addition expands the floor area of a building by either adding an upper story above the original building (Figure 6-10) or elevating the original building and constructing a new story beneath it (Figure 6-11). In both cases, it is likely that work on the load-bearing foundation will be required to carry the added load. Vertical additions may be smaller than the building footprint, such as a loft or bedroom, but the local official must still make an SI/SD determination.

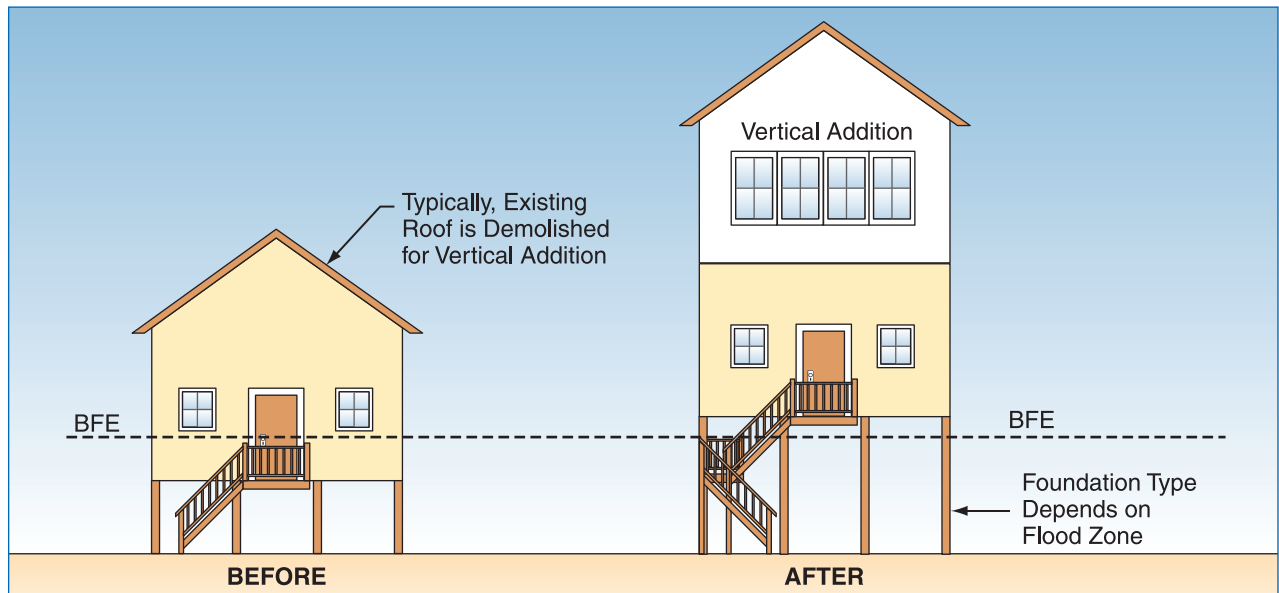


Figure 6-10. Vertical addition to a pre-FIRM residential building (in any zone) – the proposed work is a new upper story that involves structural modification. The work is a substantial improvement. The building is elevated to or above the BFE on a compliant foundation.

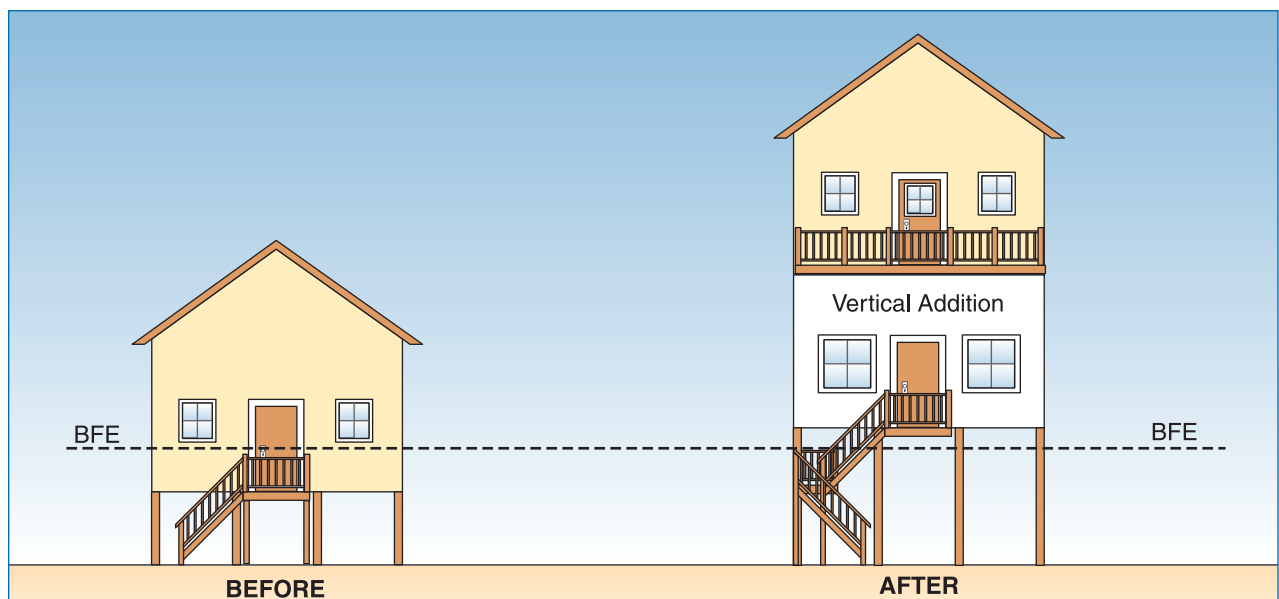


Figure 6-11. Vertical addition to a pre-FIRM residential building (in any zone) – the proposed work is a new lower story that involves structural modification. The work constitutes a substantial improvement. The building and the new lower story are elevated on a compliant foundation.

Vertical additions to pre-FIRM buildings (residential)

If a vertical addition to a pre-FIRM residential building constitutes a substantial improvement, the original building must be elevated to or above the BFE. In addition, the foundation must be modified or reconstructed (and below-grade areas filled in) to be compliant with applicable NFIP requirements based on the flood zone.

Vertical additions to pre-FIRM buildings (non-residential)

Vertical additions may involve adding an upper story above a non-residential building (Figure 6-12). If a vertical addition constitutes a substantial improvement, the original building must be elevated to or above the BFE or dry-floodproofed to the BFE (A zone only). In addition, the foundation must be modified or reconstructed (and below-grade areas filled in) to be compliant with applicable NFIP requirements based on the flood zone.

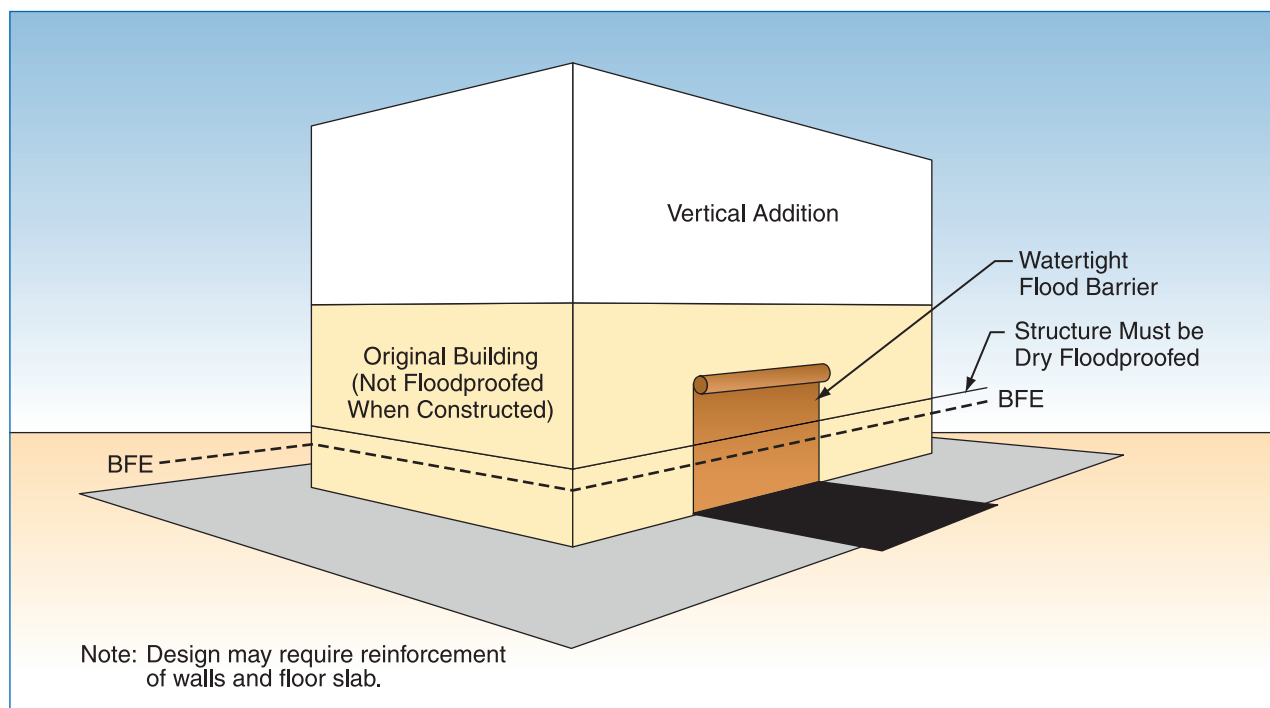


Figure 6-12. Vertical addition to a pre-FIRM, non-residential building in an A zone. The work constitutes a substantial improvement. The building is brought into compliance by retrofit dry-floodproofing measures (certification of design by registered design professional is required). Non-residential buildings can also be brought into compliance by elevation (not shown).

Vertical additions to post-FIRM buildings

Whether a local official will need to evaluate a vertical addition to a post-FIRM building to determine if it is a substantial improvement is related to whether the FIRM has been revised. If a revised, higher BFE is in effect, or if the flood zone changed (or floodway boundary changed), a vertical addition that is a substantial improvement will require that the entire building be elevated to the higher, effective BFE and comply with other applicable NFIP requirements based on the flood zone.

6.4.4 Repair, Reinforce, or Replace Foundations

It is common to repair, reinforce, or replace foundations, especially for older buildings. Foundation work also includes repair of damaged foundations, regardless of whether the damage is caused by a single event (such as a flood or earthquake) or due to deterioration over time.

Work performed on a foundation, either by itself or in combination with other work on a building, may constitute SI/SD. If the work is not a substantial improvement, the structure does not have to be elevated. However, any owner contemplating the replacement of a foundation should investigate the potential savings on the cost of NFIP flood insurance if the building is elevated and the new foundation complies with all of the applicable NFIP requirements. Many owners elect to elevate flood-prone buildings to reduce flood damage. The incremental cost to both replace a foundation and elevate a structure properly to the effective BFE may be offset by the reduction in future damage and annual flood insurance premiums.

In some cases, property owners may elect to elevate a structure, but not to the BFE. The cost to elevate a structure in this fashion must be included when making the SI/SD determination.

Foundation work on pre-FIRM buildings (residential)

If foundation work is determined to be SI/SD, then the building must be elevated in accordance with all applicable NFIP requirements, depending on the flood zone. Figure 6-13 illustrates the construction of a compliant foundation under an existing home.

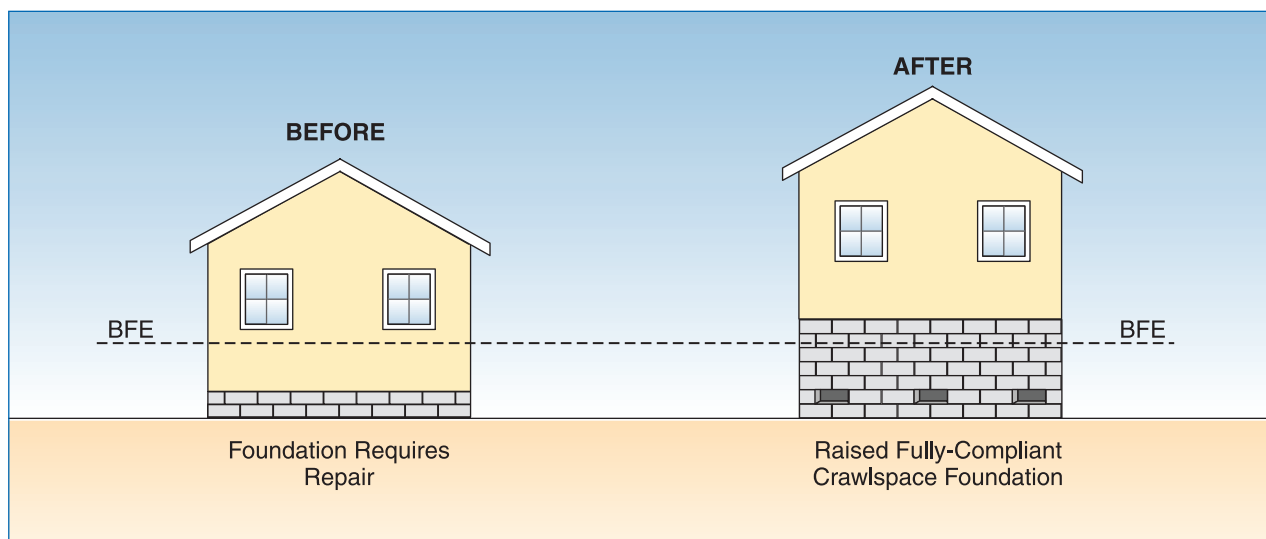


Figure 6-13. New foundation or repair of foundation under a pre-FIRM (in an A zone) residential building. The work was determined to be a substantial improvement. The building is brought into compliance by elevating on a compliant foundation.

Foundation work on pre-FIRM buildings (non-residential)

If the foundation work on a non-residential building is determined to be SI/SD, then the building must be elevated in accordance with all applicable NFIP requirements, depending on the flood zone.

As part of foundation work, owners of non-residential buildings in A zones may propose to retrofit with compliant dry-floodproofing measures. Such proposals must be supported with structural engineering analyses that indicate whether the buildings can be dry floodproofed in compliance with the NFIP requirements. The analyses must be prepared or reviewed by a registered design professional who must sign and seal the dry floodproofing designs. For guidance, see FEMA FIA-Technical Bulletin 3, *Non-Residential Floodproofing – Requirements and Certification for Buildings Located in Special Flood Hazard Areas*. The technical bulletin includes planning considerations regarding warning time, safety of personnel responsible for implementing the measures, and the importance of having an emergency operations plan and a plan for regular inspection and maintenance. ASCE 24-05, the standard for flood damage-resistant design and construction that is referenced by the model building codes, also includes similar requirements and limitations on measures that require human intervention.

6.4.5 Repair of Damaged Buildings

The NFIP requirements for repair of substantially damaged buildings are the same as those described for rehabilitation and remodeling (Section 6.4.1). However, if a proposal for repair also includes an addition to a damaged property, the cost of the addition must be included in the SI/SD determination. If the combination of work is a substantial improvement, then both the addition and the original building must be brought into compliance with the NFIP requirements, depending on the flood zone.

6.4.6 Reconstruction of Demolished or Destroyed Buildings

Any project that involves complete reconstruction, such as rebuilding on the same foundation, is new construction that must comply with all applicable NFIP floodplain management requirements. A building that is totally destroyed or so significantly damaged that it cannot be repaired is a substantially damaged building. Sometimes an owner elects to demolish the building. In these circumstances, if the decision is to reconstruct using the existing foundation, the reconstructed building must meet NFIP requirements for new construction.

6.4.7 Work on Post-FIRM Buildings

All repairs, improvements or modifications to a post-FIRM building are considered new construction (see definition in Chapter 3). Work on a post-FIRM building must not be allowed if it would make the building non-compliant with the floodplain management requirements that had to be met when the building was constructed. Tables 6-1a (A zones) and 6-1b (V zones) identify types of work on post-FIRM buildings and the compliance requirements that apply. In some cases when an addition is involved, the original building has to be brought into compliance.

6.4.8 Work on Buildings Where Flood Maps Have Been Revised

Section 5.6.11 explains that many communities have had revisions to their flood hazard maps. The following illustrate how map revisions that change flood zone designations or modify or add floodway delineations must be taken into consideration:

- If the FIRM has been revised and the SFHA has widened to include more area, that area is now subject to the NFIP requirements. For example, areas that were previously designated X zone may now be shown as A zone or V zone. Improvements and repairs to buildings that were outside of the SFHA but are now in the revised SFHA must be evaluated to determine if the work is SI/SD.
- If the FIRM has been revised and the flood zone or BFE changed, a determination that work is a substantial improvement requires that the building meet NFIP requirements for new construction based on the revised flood zone and revised BFE.
- If the FIRM has been revised and either the floodway boundaries are changed or a floodway is newly delineated, a determination that improvements or repairs to a building are SI/SD may require an encroachment analysis.

6.5 Requirements for Certain Structures

This section describes how SI/SD is addressed for certain types of buildings in accordance with the NFIP floodplain management requirements, including:

- Historic structures (Section 6.5.1)
- Manufactured homes (Section 6.5.2)
- Accessory structures and certain agricultural structures (Section 6.5.3)

6.5.1 Historic Structures

The NFIP gives special consideration to the unique value of designated historic buildings and structures. Provided such structures retain their designations, communities do not have to require them to be brought into compliance if they will be substantially improved or have been substantially damaged. Section 3.4.1 includes the NFIP's definition for "historic structures." The term includes structures that are: (1) listed or preliminarily determined to be eligible for listing in the National Register of Historic Places; (2) certified or preliminarily determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as a registered historic district; or (3) designated as historic site under a State or local historic preservation program that is approved by the Secretary of the U.S. Department of Interior. The definition does not include structures that are merely old, those that residents refer to as historic, or those that happen to be located in historic districts.

The NFIP floodplain management requirements contain two provisions that are intended to provide relief for historic structures located in SFHAs:

- (1) The NFIP definition of "substantial improvement" includes the following exclusion for historic structures: *"Any alteration of a 'historic structure,' provided that the alteration will not preclude the structure's continued designation as an 'historic structure'."* The exclusion also applies to historic structures that have been substantially damaged. This provision allows communities to exempt historic structures from the SI/SD requirements of the NFIP.

- (2) The other provision of the NFIP floodplain management regulations that provides relief for historic structures” is the variance criteria at 44 CFR § 60.6(a). This provision states: *“Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.”* This provision allows communities to handle applications for work on historic structures by issuing variances.

To address the unique needs of preserving historic structures, communities may elect to use one of the two approaches, either granting variances or exempting historic structures from the SI/SD requirements. Whichever approach is selected, it must be used in all cases when improvements or repairs are proposed for historic structures.

Using the variance option allows communities to evaluate individual requests and place conditions on the variance to make historic buildings more flood damage-resistant and to minimize flood damage. However, such conditions should not affect the historic character and design of the building.

It is important to note that additions to historic structures that are located in floodways require additional attention. While additions may not have to meet the substantial improvement requirements, they must still satisfy the NFIP requirements related to floodway encroachments. A floodway encroachment analysis must be provided to demonstrate that an addition will not cause any increase in the BFE (Section 5.6.8).

Applications for improvements to historic structures should be accompanied by two pieces of evidence: (1) documentation that confirms the building is designated an historic structure; and (2) documentation that confirms the proposed work will not preclude the structure’s continued designation. Applicants can ask the appropriate qualified entity that makes such designations to review their construction plans. A copy of the findings should be kept in the community’s permanent records.

Although compliance is not required for substantial improvement of historic structures, owners should carefully consider the benefits of implementing measures to minimize flood damage. State historic preservation agencies may have resources to help owners evaluate feasible measures. Historic buildings can be elevated on raised foundations, relocated to sites outside of SFHAs, or retrofitted with measures that reduce risk from flooding. FEMA’s *Floodplain Management Bulletin: Historic Structures* (FEMA P-467-2) provides guidance for communities and owners of historic structures.

6.5.2 Manufactured Homes

Communities that participate in the NFIP must issue permits for the placement of manufactured homes in SFHAs. This includes the placement of new manufactured homes, replacement of existing manufactured homes, substantial improvement of manufactured homes, and repair of substantially damaged manufactured homes. This requirement applies even if the community does not otherwise regulate the installation of manufactured homes.

The NFIP regulations define the following terms pertaining to manufactured homes:

- **“Manufactured home”** means *a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term ‘manufactured home’ does not include a ‘recreational vehicle.’*
- **“Manufactured home park or subdivision”** means *a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.*
- **“New manufactured home park or subdivision”** means *a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.*
- **“Expansion to an existing manufactured home park or subdivision”** means *the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).*
- **“Existing manufactured home park or subdivision”** means *a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of floodplain management regulations adopted by a community.*

A **manufactured home park** is usually owned by a single owner who rents pads and/or units.

A **manufactured home subdivision** is similar to traditional subdivisions in that each lot is individually owned.

As described below, most manufactured home placements and substantial improvements are subject to the same NFIP performance standards that apply to typical, site-built residential structures. A limited exception to the elevation requirements also is described below: under certain conditions, the exception applies to the placement of manufactured homes in existing manufactured home parks or subdivisions.

In AE, A1-30, and AH zones, the NFIP minimum requirement at 44 CFR § 60.3(c) (6) requires manufactured homes (including substantially improved homes) to be placed on permanent foundations such that their lowest floors are elevated to or above the BFE. In AO zones, the requirement is for lowest floors to be elevated above the highest adjacent grade at least as high as the depth number specified on the FIRM. Manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

In V zones, the NFIP minimum requirement at 44 CFR § 60.3(e) (8) requires manufactured homes (including substantially improved homes) to be placed on permanent foundations such that the lowest horizontal structural members (generally the bottom of the chassis frame) are elevated to or above the BFE. Manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. And, as with other buildings in V zones, foundations must be designed to withstand flood forces.

In both A zones and V zones, the above-described requirements apply to sites that are:

- Outside of a manufactured home park or subdivision (individually owned parcels),
- In a new manufactured home park or subdivision,
- In an expansion to an existing manufactured home park or subdivision, or
- In an existing manufactured home park or subdivision on which a home has incurred substantial damage as a result of a flood.

The exception in the NFIP regulations allows an alternative to the requirement to elevate the lowest floors of manufactured homes to the BFE [44 CFR § 60.3(c)(12) and § 60.3(e)(8)]. The exception is applicable only for placements or substantial improvements on lots in existing manufactured home parks and subdivisions. It allows the chassis of a manufactured home to be elevated on reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade. Although the NFIP allows this exception, communities should consider requiring full elevation in flood hazard areas where the floodwaters are known to be swift or more than 3 feet deep because these conditions pose greater risk to vulnerable manufactured homes and their occupants.

NFIP requirements for the substantial improvement of manufactured homes are the same as for residential structures. Specifically, a lateral addition that is determined to be a substantial improvement is illustrated in Figure 6-6. In this case, both the addition and the existing manufactured home must be elevated.

For additional information on the placement and substantial improvement of manufactured homes in SFHAs, see FEMA P-85, *Protecting Manufactured Homes from Floods and Other Hazards: A Multi-Hazard Foundation and Installation Guide*.

6.5.3 Accessory Structures and Certain Agricultural Structures

Floodplain management requirements, including the elevation and SI/SD requirements, apply to accessory structures and agricultural structures. Whether improvements, repairs, or additions to agricultural structures are proposed, local officials must make determinations based on costs and market values. If the work is SI/SD, the requirements apply and accessory structures and agricultural structures must be brought into compliance.

FEMA recognizes that wet floodproofing may be appropriate for accessory structures (garages and sheds only) and certain types of agricultural structures. Certain agricultural structures that qualify for this treatment are those located in wide, expansive floodplains, including farm storage buildings, grain bins, corn cribs, and general purpose barns. All other agricultural structures must comply with the NFIP requirements for non-residential structures. Homes that are built on farms are not agricultural structures and they must fully comply with the NFIP

Wet floodproofing means permanent or contingent measures applied to a structure and/or its contents that prevent or provide resistance to damage from flooding by allowing water to enter the structure. For specifics, see FEMA FIA-Technical Bulletin 7, *Wet Floodproofing Requirements for Structures Located in Special Flood Hazard Areas*.

requirements. For additional guidance, see FEMA FIA-Technical Bulletin 7, *Wet Floodproofing Requirements for Structures Located in Special Flood Hazard Areas*.

In accordance with the requirements for issuance of variances (Section 5.6.7), communities may grant variances for substantial improvement of accessory structures and certain agricultural structures to allow the use of wet floodproofing measures in lieu of elevation. However, such variances may be granted only if the following conditions are satisfied:

- For certain agricultural structures, the structure is used solely for the parking of agricultural vehicles and machinery, the storage of crops, or the temporary sheltering of livestock;
- For accessory structures, the structure is used only for parking of vehicles and storage;
- The structure is designed and built in such a manner that results in minimal damage to the structure and its contents, including being anchored to resist flotation, collapse, and lateral movement;
- Flood damage-resistant materials must be used below the BFE;
- Mechanical and utility equipment must be elevated or floodproofed to or above the BFE;
- If in the floodway, the floodway encroachment requirements must be satisfied; and
- There will be no additional threats to public safety.

Communities should carefully evaluate improvements made to accessory structures and agriculture structures. If a property owner intends to change the use of the structure to a residential use or other non-residential use, then the work proposed must be evaluated to determine whether it is a substantial improvement.

6.6 NFIP Flood Insurance Implications

The flood insurance rating structure used by the NFIP uses three primary factors:

- Flood zone (A zone or V zone);
- Date of construction (pre-FIRM or post-FIRM), including the date of construction of substantial improvements; and
- For post-FIRM buildings, the elevation of the lowest floor compared to the BFE as evidenced by surveyed elevation data (or for floodproofed non-residential buildings, the height of the floodproofing relative to the BFE).

Rates used for pre-FIRM structures are called “subsidized” or discounted rates. An NFIP policy can be purchased without providing elevation data that are obtained by a survey.

Rates used for post-FIRM structures (and pre-FIRM structures that are substantially improved) are called “elevation” rates because they depend on the elevation of the lowest floor relative to the BFE. Elevation rates are considered to be “actuarial.” To be properly rated, surveyed elevation data are required.

The NFIP requires that substantially improved or substantially damaged buildings be brought into compliance. NFIP flood insurance policies on those buildings are written using rates based on elevation. In most cases, the premium will decrease when a pre-FIRM building is substantially improved and

brought into compliance. The building becomes a post-FIRM building and premiums are calculated using elevation rates.

When questions arise concerning how a proposed improvement might affect a flood insurance policy, it is always best to encourage property owners to obtain a cost estimate from an insurance agent. Table 6-2 indicates how compliance with the SI/SD requirements affects how policies are rated. Figure 6-14 illustrates an example of how the cost of an NFIP policy will vary, depending on how a substantially damaged home is repaired.

Table 6-2. Substantial Improvement and NFIP Flood Insurance Implications

	Description of Work	NFIP Flood Insurance Implications
Pre-FIRM	Interior renovation only, work constitutes SI; whole building brought into compliance by elevating the lowest floor at or above the BFE. <i>Or</i> Structurally-connected lateral addition or second story addition, work constitutes SI; whole building brought into compliance.	Policy is written using post-FIRM elevation rates based on a survey of new lowest floor elevation at or above the BFE.
Pre-FIRM	Interior renovation only, work constitutes SI; building is NOT elevated in compliance with the requirements (i.e., it is a violation). <i>Or</i> Second story addition, work constitutes SI; building is NOT elevated in compliance with the requirements (i.e., it is a violation).	Policy is written using post-FIRM elevation rates based on a survey of new lowest floor below the BFE, which may result in a significantly higher flood insurance premium. <i>Or</i> If the owner refuses to address the violation and bring the building into compliance, the community may cite the structure as a violation in accordance with Sec. 1316 of the National Flood Insurance Act of 1968, which allows the NFIP to deny flood insurance on all insurable buildings on the property (Section 5.6.13).
Pre-FIRM	Lateral addition not structurally connected (connecting door only), work constitutes SI and only the addition is elevated.	Policy is written using subsidized rates because the original building is unchanged.
Post-FIRM	Lateral addition, regardless of value; addition is not elevated, thus, the building is not in compliance (i.e., it is a violation).	Policy is written using elevation rates based on the elevation of the lowest floor of the addition, which may result in a significantly higher flood insurance premium.

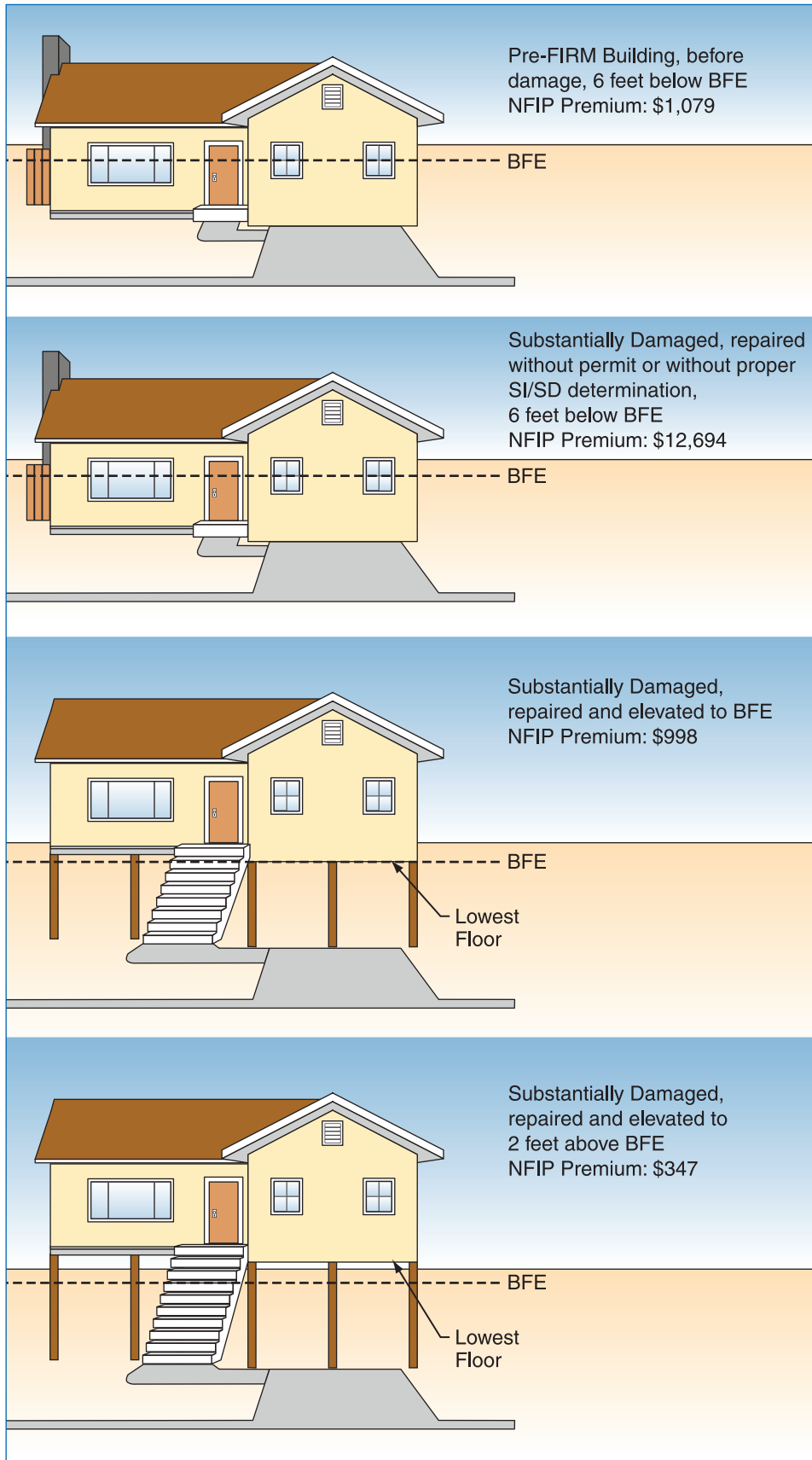
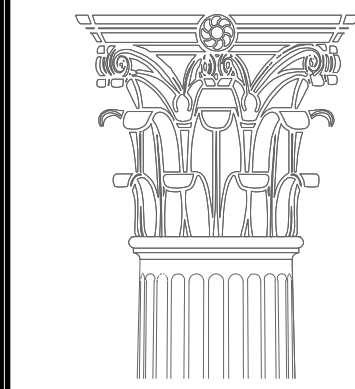


Figure 6-14. The cost of NFIP flood insurance policy varies depending on how a substantially damaged building is repaired. This illustration is for \$150,000 in structure coverage with the rates as of October 2009. The figure is for comparison purposes only.

R. KEITH DAVIS IS THE OWNER OF THE HOME DESIGN ILLUSTRATED IN THESE DRAWINGS AND RESERVES ALL COMMON LAW COPYRIGHTS AND OTHER PROPERTY RIGHTS AS ALLOWED BY LAW. THESE PLANS MAY NOT BE USED AGAIN, REPRODUCED, SOLD, OR ASSIGNED TO A THIRD PARTY WITHOUT PRIOR WRITTEN PERMISSION AND APPROVAL OF R. KEITH DAVIS.



CONSULTANTS
STRUCTURAL ENGINEERS

LANDSCAPE ARCHITECT:

INTERIOR DESIGNER:

AN ADDITION AND RENOVATION OF THE RESIDENCE OF

MS. BJ GORMAN
406 W Brunswick St. Southport, NC 28461

R. KEITH DAVIS

CUSTOM DESIGN AND PLANNING

212 BITMORE RD., WHITEVILLE, N.C. 28472 / 910 840-1972

REVISIONS

[illegible]

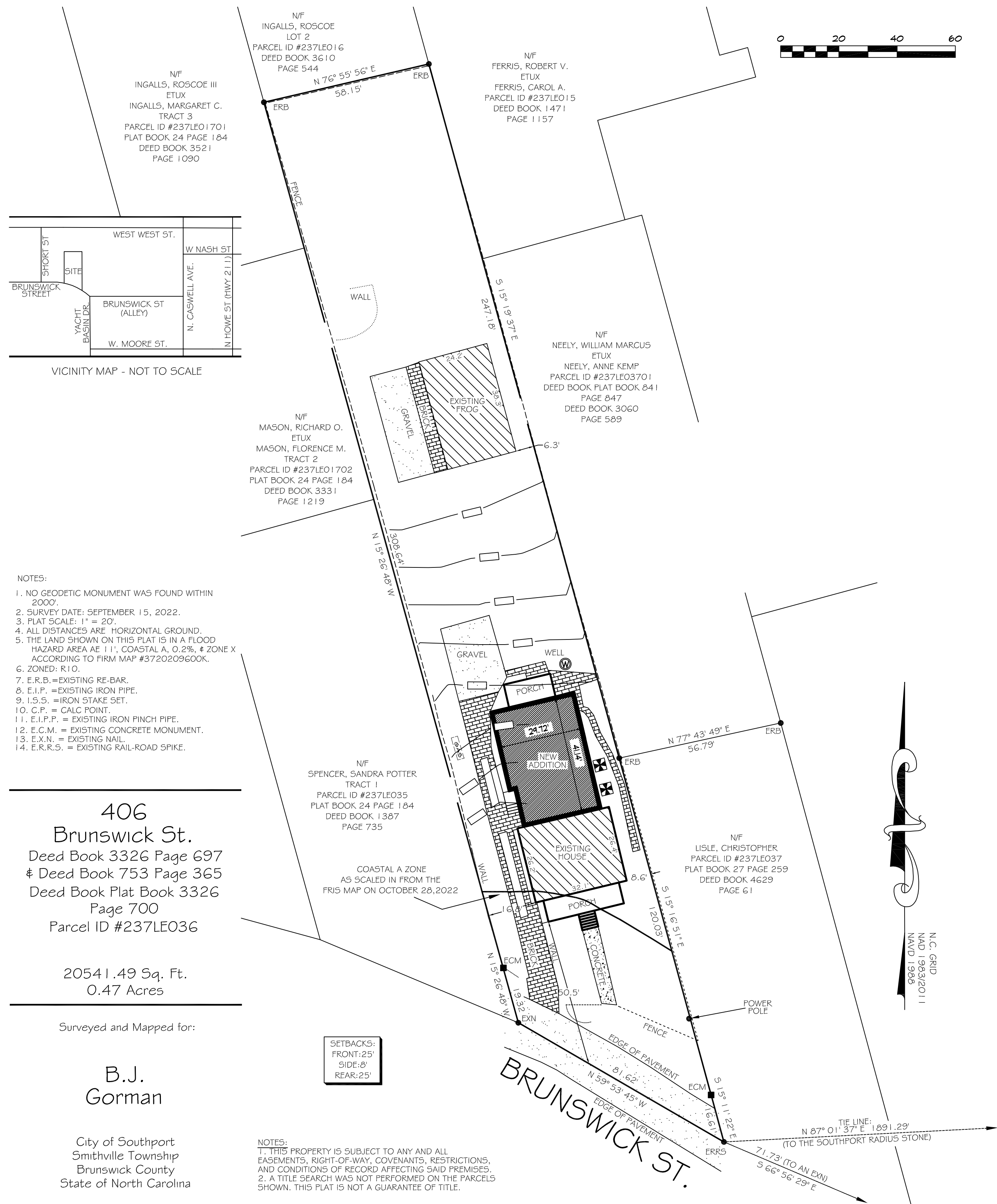
DATE: 8/3/2022

DRAWN BY: R.K. Davis

SHEET NO.

SP

of 10



406

Brunswick St

Deed Book 3326 Page 697

Deed Book 753 Page 365

Page 700

Parcel ID #237LE036

20541.49 Sq. Ft
0.47 Acres

Surveyed and Mapped for

B.J.
Gorman

City of Southport
Smithville Township
Brunswick County
State of North Carolina

NOTES:
1. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT-OF-WAY, COVENANTS, RESTRICTIONS, AND CONDITIONS OF RECORD AFFECTING SAID PREMISES.
2. A TITLE SEARCH WAS NOT PERFORMED ON THE PARCELS SHOWN. THIS PLAT IS NOT A GUARANTEE OF TITLE.

SITE PLAN

$$|'' = |O'-O'$$

406 W. Brunswick St. New Addition

BJ Gorman

New Addition

Date	Num	Source Name	Memo	Debit	Credit	Balance
115 - Notes Receivable						
115.A - 406 W. Brunswick St. Investment						
115.A2 - New Construction 406 W Brunswick						
10/11/2023	3419	Faircloth Construction	Reimbursement for Roof Trusses purchased from Lowes	13,525.37		13,525.37
10/12/2023	3420	Faircloth Construction	Reimbursement for Framing Package from Lowes	8,187.39		21,712.76
10/31/2023	3421	Donnie Price Masonry	Partial Payment on Masonry Contract	8,000.00		29,712.76
11/01/2023	3422	Donnie Price Masonry	Partial Payment on Masonry Contract	9,732.40		39,445.16
11/03/2023	3423	Kenny McClain Landscaping, LLC	Kenny McClain Landscaping, LLC =Foundation Wall fill & compact	3,152.00		42,597.16
11/17/2023	3425	LYL & B Construction	Framing Contract Advance Payment	4,000.00		46,597.16
11/20/2023	3424	Southport Concrete Corp	406 W Brunswick Slab	3,569.72		50,166.88
11/20/2023	3428	Faircloth Construction	Labor, Materials & Rental Equip.	7,375.88		57,542.76
12/05/2023	3431	Lowe's Companies, Inc.	Account # 81100416135515 - 406 W Brunswick	10,113.39		67,656.15
12/09/2023	3426	LYL & B Construction	Framing	6,000.00		73,656.15
12/19/2023	3434	LYL & B Construction	Framing	10,000.00		83,656.15
12/27/2023	3435	Faircloth Construction	Labor, Materials & Rental Equip.	12,278.63		95,934.78
12/30/2023	2968	Brunswick County Landfill	Fee Construction Material to Landfill	20.06		95,954.84
01/05/2024	3436	LYL & B Construction	Framing Contract Final \$6K + Materials \$565.	6,565.00		102,519.84
01/06/2024	3438	Sonny Helms	Advance on Contract New Construction - 406 W Brunswick St.	5,000.00		107,519.84
01/10/2024	3441	Faircloth Construction	Labor, Materials & Rental Equip. (Hardi Plank \$5910.73, Roof Me...	16,493.57		124,013.41
01/10/2024	3437	Eastern Insulation	Quote # 824628 / 3 dated 01-08-2024 Gorman 106 W Brunswick	4,042.00		128,055.41
01/11/2024	3442	Blossman Gas Company	Partial Pymt on LP Installation	2,737.71		130,793.12
01/17/2024	2959	Brunswick County Landfill	Fee Construction Material to Landfill	35.40		130,828.52
01/22/2024	3352	Norris Heating And Air Conditioning, Inc.	Rough in HVAC ductwork and air handler	10,000.00		140,828.52
01/25/2024	3443	LYL & B Construction	Exterior Contract	5,700.00		146,528.52
01/27/2024	2960	Robert Howard	Fee Construction Material to Landfill	28.91		146,557.43
01/29/2024	3444	Sonny Helms	Advance on Contract New Construction - 406 W Brunswick St.	5,180.00		151,737.43
01/30/2024	3445	Shallotte Electric Stores	Order Deposit Bath Fixtures & Plumbing Materials	2,516.00		154,253.43
01/31/2024	3447	Lowe's Companies, Inc.	Account # 81100416135515 - 406 W Brunswick	8,575.48		162,828.91
01/31/2024	3448	Trust Bankcard	Card Pymt (PayPal Cedar Valley Mfg. Inc) for Invoice # IN58093	8,123.68		170,952.59
01/31/2024	3449	Faircloth Construction	406 W Brunswick Street	11,073.60		182,026.19
01/31/2024	2965	Brunswick County Landfill	Fee Construction Material to Landfill	22.42		182,048.61
02/05/2024	2970	Brunswick County Landfill	Fee Construction Material to Landfill	30.68		182,079.29
02/07/2024	2972	Brunswick County Landfill	Fee Construction Material to Landfill	40.71		182,120.00
02/07/2024	3450	Ken Worden	Sheetrock Installation & Finishing Contract Progress Payment	2,000.00		184,120.00
02/08/2024	2973	Brunswick County Landfill	Fee Construction Material to Landfill	67.85		184,187.85
02/08/2024	2974	Brunswick County Landfill	Fee Construction Material to Landfill	6.75		184,194.60
02/09/2024	3451	John's Plumbing	Progress Payment - 406 W Brunswick	7,077.00		191,271.60
02/09/2024	3452	LYL & B Construction	Exterior Contract	8,000.00		199,271.60
02/09/2024	3454	North State Woodcraft	Deposit on Cabinets etc. 406 Brunswick Street	13,515.00		212,786.60
02/12/2024	2983	Brunswick County Landfill	Fee Construction Material to Landfill	33.63		212,820.23
02/18/2024	5040	Donnie Price Masonry	Robert Howard: Masonry on Side & Back Pourches 406 W. Brunsw...	900.00		213,720.23
02/20/2024	2985	Brunswick County Landfill	Fee Construction Material to Landfill	15.93		213,736.16
02/23/2024	3455	LYL & B Construction	Exterior Contract	14,279.00		228,015.16
02/23/2024	3456	Ken Worden	Sheetrock Installation & Finishing Contract Progress Payment	500.00		228,515.16
02/24/2024	2991	Brunswick County Landfill	Fee Construction Material to Landfill	38.94		228,554.10
03/01/2024	2992	Brunswick County Landfill	Fee Construction Material to Landfill	15.93		228,570.03
03/02/2024	12191	Lowe's Companies, Inc.	Materials & Supplies - 406 W Brunswick Street	778.44		229,348.47
03/06/2024	3459	Ken Worden	Sheetrock Installation & Finishing Contract Progress Payment	2,500.00		231,848.47
03/06/2024	3460	Faircloth Construction	406 W Brunswick Street	9,010.22		240,858.69
03/06/2024	2999	Brunswick County Landfill	Fee Construction Material to Landfill	15.34		240,874.03
03/08/2024	3461	Christie Nealey	Paint Contract - Progress Payment \$7,800 Exterior & \$2,088 Interior	9,888.00		250,762.03
03/08/2024	3042	Baldwin Brass	Door Knobs Interior & Exterior	3,077.75		253,839.78
03/12/2024	3009	Brunswick County Landfill	Fee Construction Material to Landfill	18.29		253,858.07
03/12/2024	3466	Eastern Insulation	Final Payment Quote # 824628 / 3 dated 01-08-2024 Gorman 106 ...	4,042.00		257,900.07
03/12/2024	3467	Shallotte Electric Stores	Final Payment Order 2552469	2,855.95		260,756.02
03/12/2024	3484	D The Floor Man Inc.	3-12-24 Proposal Floating Option Downstairs	15,986.00		276,742.02
03/12/2024	3469	FloorTex, Inc.	Estimate # 11132 - Deposit	10,117.98		286,860.00
03/14/2024	3462	Joe Cash Electric	Electrical Contract 406 W Brunswick	7,714.00		294,574.00
03/15/2024	3041	1 STOPLIGHT	Pymt. CC for 406 W. Brunswick Light Fixture	420.17		294,994.17
03/22/2024	3038	Brunswick County Landfill	Fee Construction Material to Landfill	20.06		295,014.23
03/26/2024	3037	Brunswick County Landfill	CASH: Fee Construction Material to Landfill	17.11		295,031.34
03/26/2024	3472	Joe Cash Electric	Electrical Contract 406 W Brunswick	5,640.00		300,671.34
03/27/2024	3478	Eric Schrom	Materials & Labor	6,355.00		307,026.34
03/28/2024	3474	Norris Heating And Air Conditioning, Inc.	Progress Pymnt 406 W Brunswick St. Contract	7,743.00		314,769.34
04/03/2024	3475	Lowe's Companies, Inc.	Light Fixtures & Electrical Supplies - 406 W Brunswick Street	882.98		315,652.32
04/26/2024	3070		RDH: Clawfoot Tub Shower Set for 406 W Brunswick Street	194.25		315,846.57
05/11/2024	3490	Eric Schrom	Labor & Materials - 406 W Brunswick Street	6,460.00		322,306.57
05/24/2024	3100	Brunswick County Landfill	Fee Construction Material to Landfill	24.19		322,330.76
05/25/2024	3101	Brunswick County Landfill	Fee Construction Material to Landfill	28.91		322,359.67
05/28/2024	3501	Eric Schrom	Labor & Materials - 406 W Brunswick Street	3,721.00		326,080.67
05/30/2024	3103		Lowes Statement 5-22-24 Various Construction	338.44		326,419.11
06/03/2024	3502	John's Plumbing	Final Payment on Contract - 406 W Brunswick	4,718.00		331,137.11
Total 115.A2 - New Construction 406 W Brunswick				331,137.11	0.00	331,137.11
Total 115.A - 406 W. Brunswick St. Investment				331,137.11	0.00	331,137.11
Total 115 - Notes Receivable				331,137.11	0.00	331,137.11
TOTAL				331,137.11	0.00	331,137.11



CPI Inflation Calculator

CPI Inflation Calculator

\$ 319,000.00

in December ▼ 2023 ▼

has the same buying power as

\$326,073.73

in April ▼ 2024 ▼

Calculate

About the CPI Inflation Calculator

The CPI inflation calculator uses the [Consumer Price Index](#) for All Urban Consumers (CPI-U) U.S. city average series for all items, not seasonally adjusted. [This data](#) represents changes in the prices of all goods and services purchased for consumption by urban households.

U.S. BUREAU OF LABOR STATISTICS Postal Square Building 2 Massachusetts Avenue NE Washington, DC 20212-0001

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