

**US Army Corps
of Engineers®**



HARPETH RIVER FEASIBILITY STUDY HOME RAISING PROGRAM

INFORMATIONAL MEETING

JULY 18, 2019

Meeting Overview

- **Introductions**
- **Scope of Meeting**
- **Project History**
- **Project Overview**
- **Selection Process For Eligible Homes (USACE)**
- **Participation Guidelines**
- **Frequently Asked Homeowner Questions**
- **Future Steps / How We Move Forward to Construction**
- **Audience Questions and Comments**



Introductions

- City of Franklin
- US Army Corp of Engineers (USACE or Corps)

Scope Of Meeting



Project History

- **May 2010 Flood Event –**
 - **USACE conducted preliminary reconnaissance of the Harpeth River Watershed.**
 - **Over 850 structures in the regulated floodplain within the basin located in the City of Franklin, Metro Nashville, City of Brentwood, and Williamson County.**
- **June 2013 –**
 - **City of Franklin, Metro Nashville, City of Brentwood, and Williamson County signed an initial Harpeth River Feasibility Study Agreement to analyze alternative flood risk management options.**
 - **The USACE determined that two flood risk management projects were considered economically justified for further development. These two projects included the Franklin Road channel modifications and VOLUNTARY nonstructural home buyout and/or raisings.**
- **September 2016 – City of Franklin entered in to second agreement with the USACE to fully develop the two identified flood risk management projects.**



Project History

- June 2017 – BOMA approved constructing the Franklin Road channel modifications within the Franklin Road Streetscape Project.
- April 2018 –
 - Franklin Road channel modifications were deemed economically unjustifiable. The City already agreed to fully fund these modifications.
 - The nonstructural home buyouts were deemed economically unjustifiable. Only the home raisings would move forward as the program option.
- July 2018 – BOMA agreed to participate in the USACE project as the Non-Federal Sponsor. This allowed the USACE to move forward with finalizing the draft study.
- April 2019 – BOMA agreed to help fund a portion of the homeowner project costs.



Project Overview

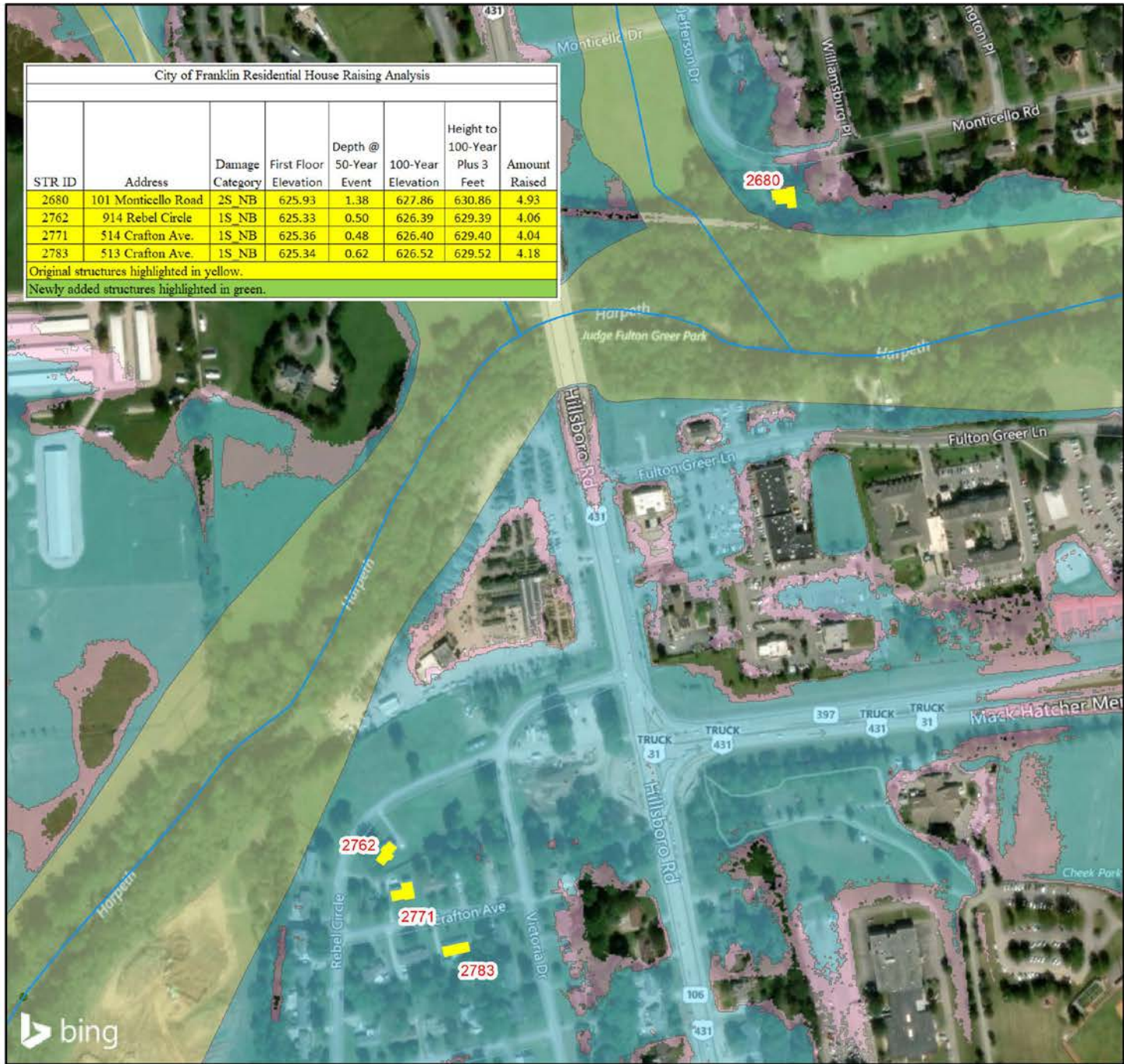
- The USACE home raising program is sponsored by the City of Franklin, as part of a Project Partnership Agreement for design and construction of the project. Construction is managed by the USACE, City of Franklin, and the homeowner.
- This is a VOLUNTARY program for the 35 eligible homes.
- Eligible homes are raised three feet above the base flood elevation, following the City's Zoning Ordinance requirements.
- The USACE individually justified the 35 homes based on the damages they are experiencing (amount & frequency) and the cost to protect (cost of raising). They surveyed each structure's first floor elevation.
- The current cost estimate provided by the USACE is approximately \$5,000,000 for all 35 properties. The USACE agrees to pay for 65% of the actual construction and temporary relocation costs. The City and homeowner would be responsible for the remaining 35% (17.5% City of Franklin / 17.5% Homeowner).



Project Overview

- The home construction estimates include the cost of raising the home (by a certified home raiser), the construction of new foundation (cinder block or brick), the reconnection of utilities & duct work, and restoration of landscaping/grass, etc. There is also the cost of temporary housing for up to 3 months. The duration of the temp housing depends on the construction duration and local codes on habitation.
- The homeowner hires the construction contractor, but the USACE will provide a list of pre-approved contractors and review the proposals. The goal is to assist the homeowner to the fullest extent possible to achieve quality, sustainable flood protection.
- The contractor's design professional will evaluate the condition, stability, and strength of the existing foundation to determine whether it can support the increased load of the elevated home, or designing a new foundation.
- Maps showing eligible homes follow this slide...



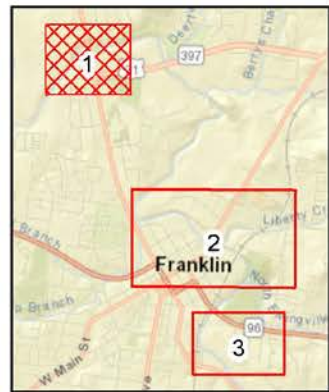


US Army Corps of Engineers

Panel 1

Map 1 of 3

Nonstructural Raises for the City of Franklin



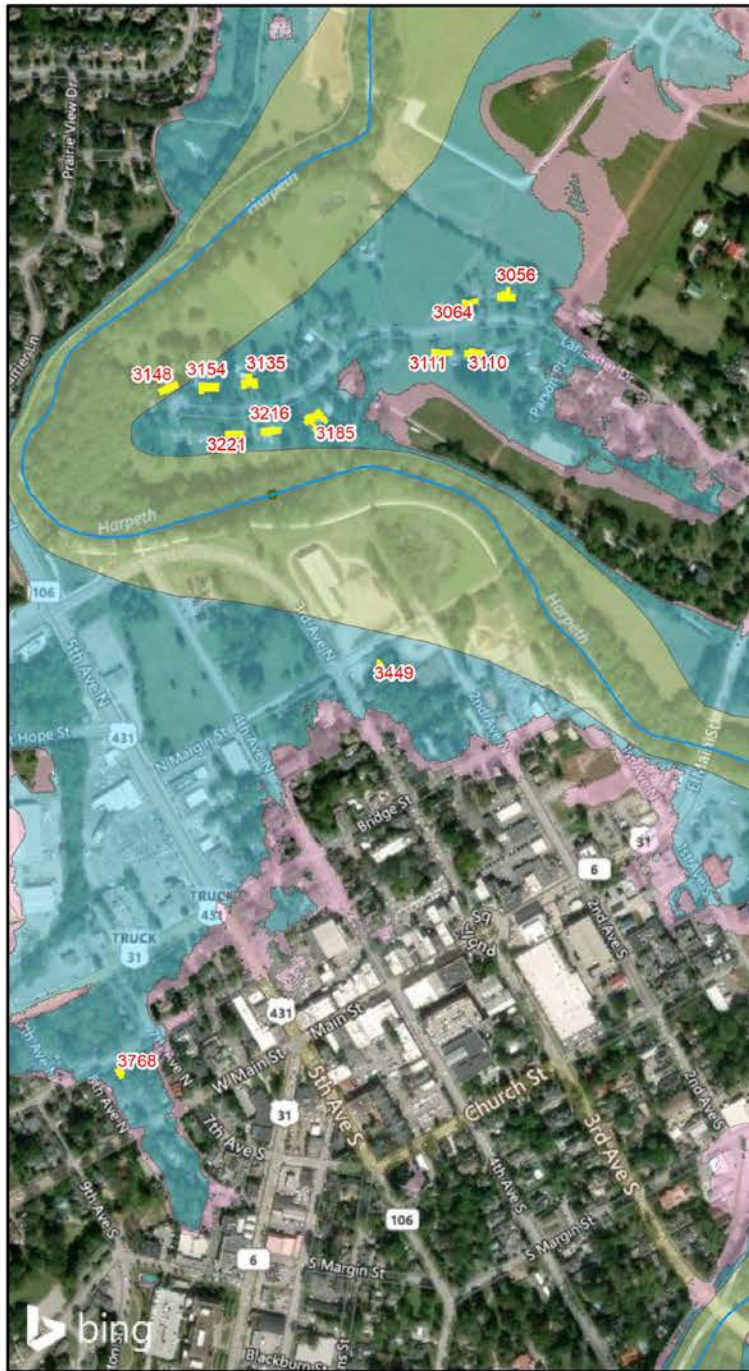
Legend

- Streams
- Nonstructural Raises
- River Miles
- Preliminary FEMA Boundaries**
 - Floodway
 - 100-Year Floodplain
 - 500-Year Floodplain



0 115 230 460 Feet





City of Franklin Residential House Raising Analysis

STR ID	Address	Damage Category	First Floor Elevation	Depth @ 50-Year Event	100-Year Elevation	Height to 100-Year Plus 3 Feet	Amount Raised
3056	150 Lancaster Drive	1S_NB	632.65	1.18	635.17	638.17	5.52
3064	154 Lancaster Drive	2S_NB	630.09	3.74	635.17	638.17	8.08
3110	147 Lancaster Drive	1S_NB	632.01	1.82	635.17	638.17	6.16
3111	151 Lancaster Drive	1S_NB	631.94	1.89	635.17	638.17	6.23
3135	174 Lancaster Drive	1S_NB	633.45	0.85	635.63	638.63	5.18
3148	182 Lancaster Drive	1S_NB	633.68	0.91	635.91	638.91	5.23
3154	178 Lancaster Drive	1S_NB	634.27	0.12	635.72	638.72	4.45
3185	169 Lancaster Drive	1S_NB	635.44	0.21	635.17	638.17	2.73
3216	173 Lancaster Drive	1S_NB	634.61	0.97	636.87	639.87	5.26
3221	177 Lancaster Drive	1S_NB	634.89	0.53	636.72	639.72	4.83
3427	109 Daniels Dr.	1S_NB	635.69	2.54	639.79	642.79	7.10
3428	111 Daniels Drive	1S_NB	635.59	2.64	639.79	642.79	7.20
3429	107 Daniels Drive	1S_NB	635.35	2.88	639.79	642.79	7.44
3449	221 North Margin St.	1S_NB	632.43	3.22	636.94	639.94	7.51
3768	717 Fair Street	1S_NB	633.68	1.28	636.28	639.28	5.60
3799	406 Eddy Lane	1S_NB	634.72	5.57	642.50	645.50	10.78

Original structures highlighted in yellow.
Newly added structures highlighted in green.

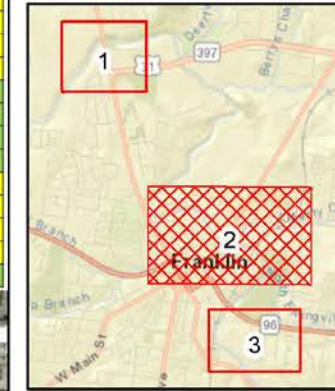


US Army Corps of Engineers

Panel 2

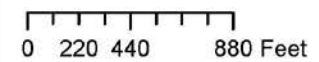
Map 2 of 3

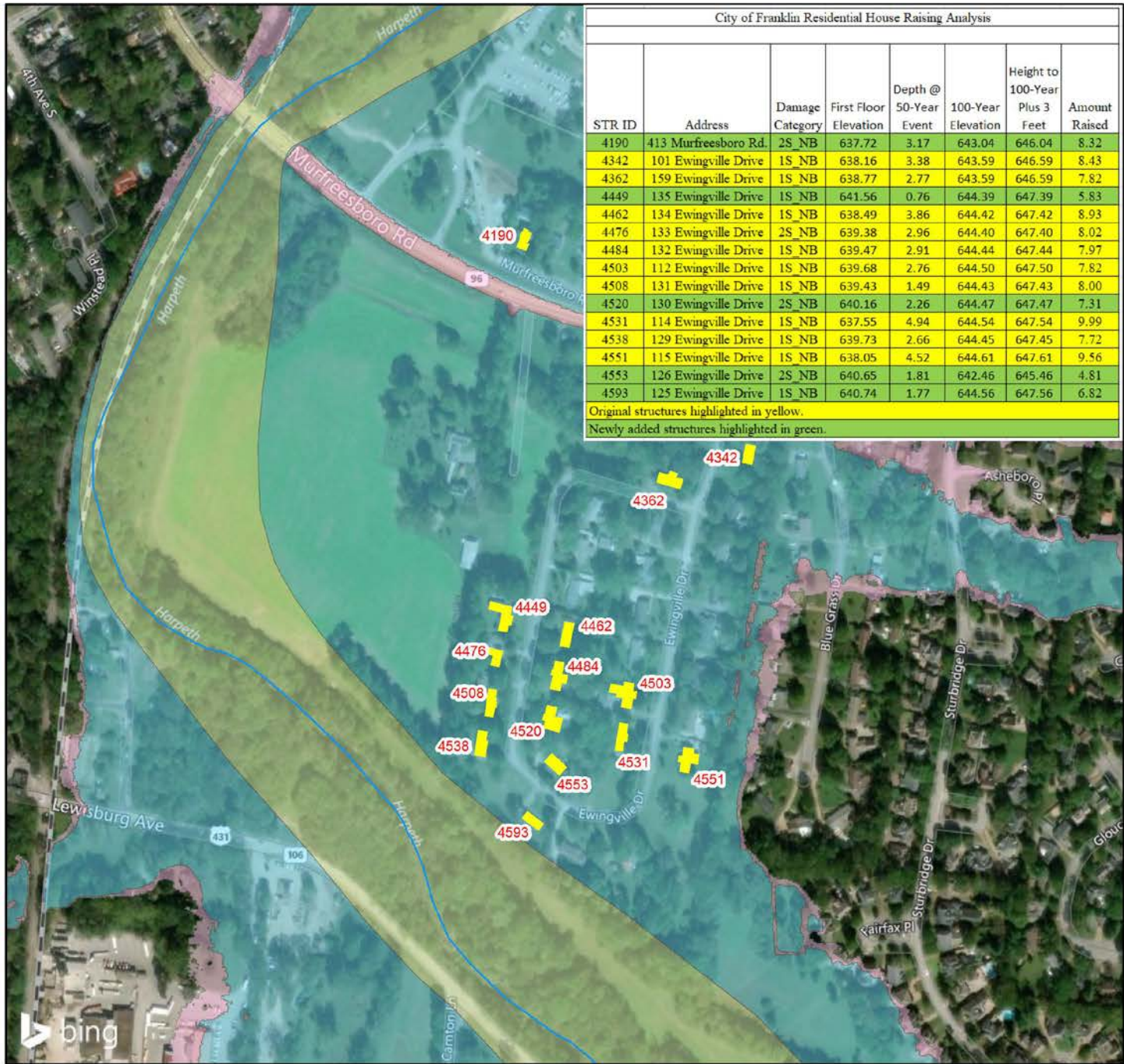
Nonstructural Raises for the City of Franklin



Legend

- Streams
- Nonstructural Raises
- River Miles
- Preliminary FEMA Boundaries**
 - Floodway
 - 100-Year Floodplain
 - 500-Year Floodplain





City of Franklin Residential House Raising Analysis

STR ID	Address	Damage Category	First Floor Elevation	Depth @ 50-Year Event	100-Year Elevation	Height to 100-Year Plus 3 Feet	Amount Raised
4190	413 Murfreesboro Rd.	2S_NB	637.72	3.17	643.04	646.04	8.32
4342	101 Ewingville Drive	1S_NB	638.16	3.38	643.59	646.59	8.43
4362	159 Ewingville Drive	1S_NB	638.77	2.77	643.59	646.59	7.82
4449	135 Ewingville Drive	1S_NB	641.56	0.76	644.39	647.39	5.83
4462	134 Ewingville Drive	1S_NB	638.49	3.86	644.42	647.42	8.93
4476	133 Ewingville Drive	2S_NB	639.38	2.96	644.40	647.40	8.02
4484	132 Ewingville Drive	1S_NB	639.47	2.91	644.44	647.44	7.97
4503	112 Ewingville Drive	1S_NB	639.68	2.76	644.50	647.50	7.82
4508	131 Ewingville Drive	1S_NB	639.43	1.49	644.43	647.43	8.00
4520	130 Ewingville Drive	2S_NB	640.16	2.26	644.47	647.47	7.31
4531	114 Ewingville Drive	1S_NB	637.55	4.94	644.54	647.54	9.99
4538	129 Ewingville Drive	1S_NB	639.73	2.66	644.45	647.45	7.72
4551	115 Ewingville Drive	1S_NB	638.05	4.52	644.61	647.61	9.56
4553	126 Ewingville Drive	2S_NB	640.65	1.81	642.46	645.46	4.81
4593	125 Ewingville Drive	1S_NB	640.74	1.77	644.56	647.56	6.82

Original structures highlighted in yellow.
 Newly added structures highlighted in green.

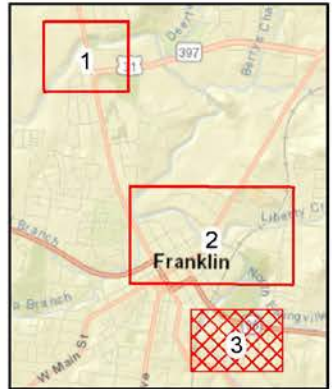


US Army Corps of Engineers

Panel 3

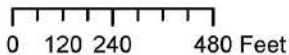
Map 3 of 3

Nonstructural Raises for the City of Franklin

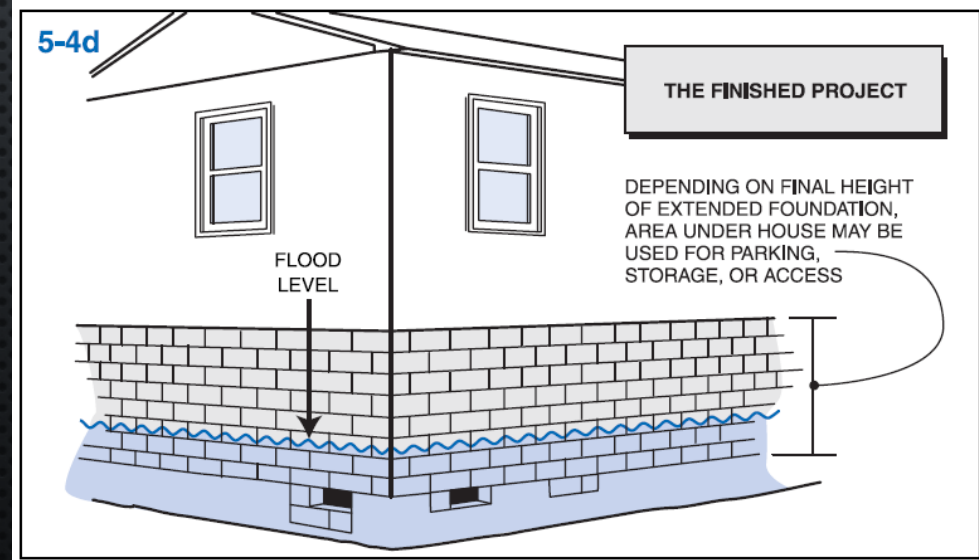
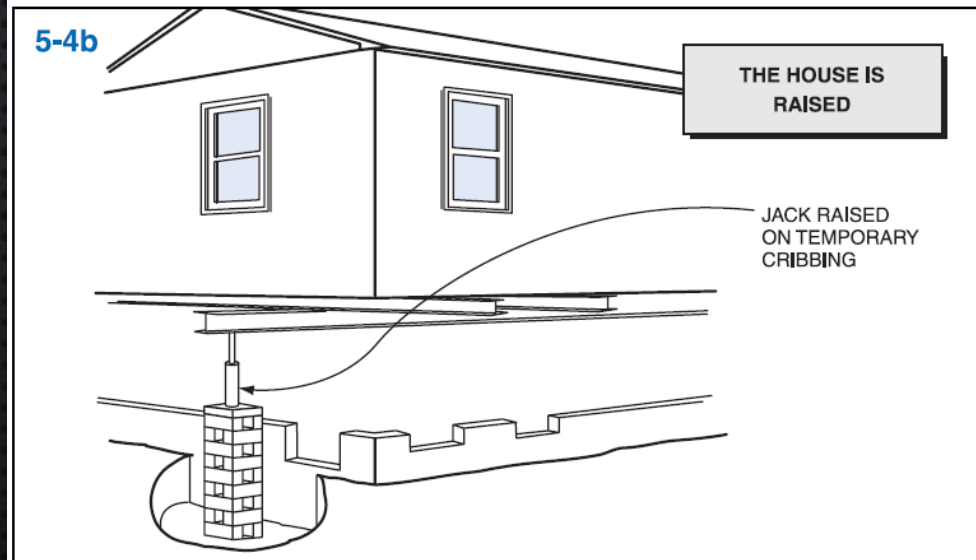
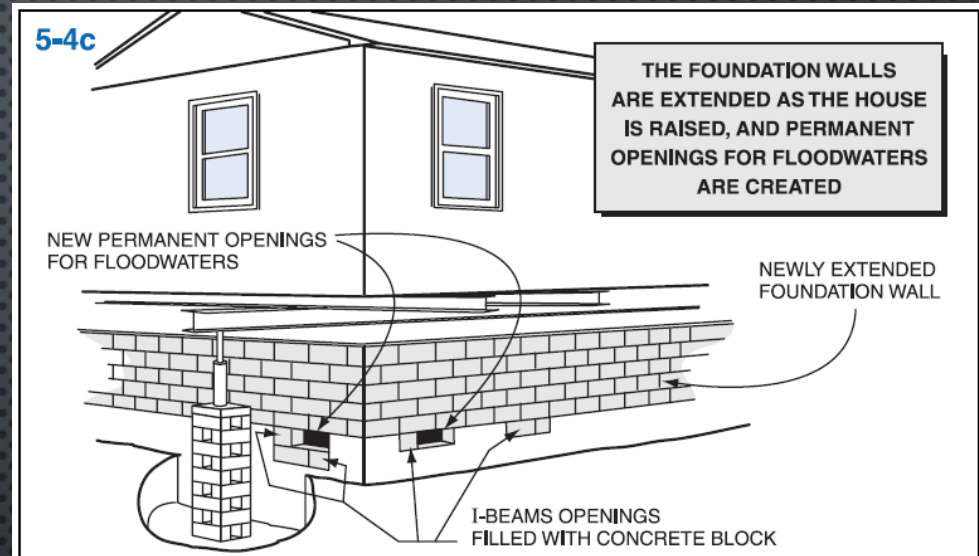
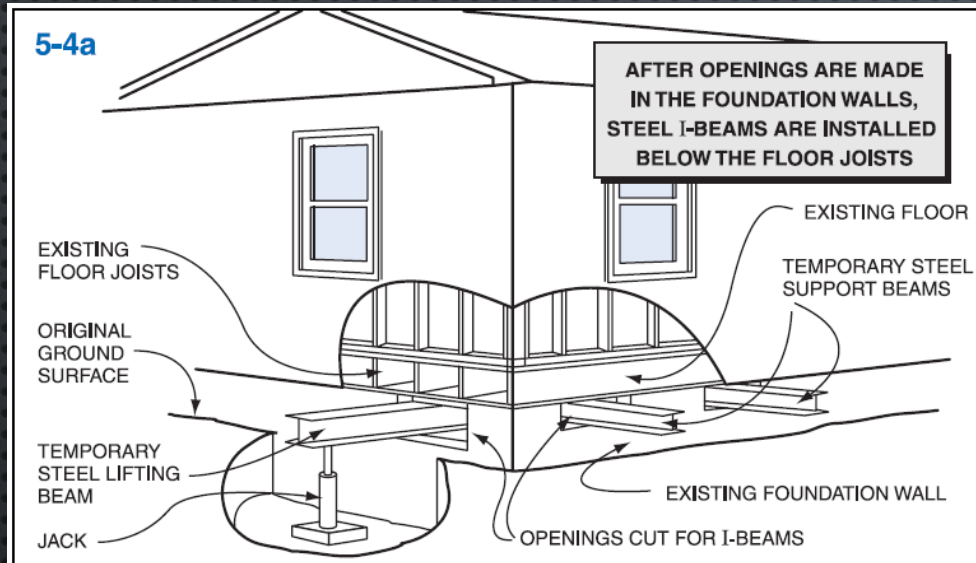


Legend

- Streams
- Nonstructural Raises
- River Miles
- Preliminary FEMA Boundaries**
 - Floodway
 - 100-Year Floodplain
 - 500-Year Floodplain



Project Overview



Project Overview



Project Overview



Project Overview



Selection Process For Eligible Homes

Q: How were the homes chosen? What criteria?

A: The USACE individually justifies homes based on the damages they are experiencing (amount & frequency) and the cost to protect (cost of raising). We survey each structure's first floor elevation.

For example: Homes may be on the same contour line/elevation, but one's first floor sits higher due to type of construction, fill material, etc. If a home is on a slab, their first floor is getting wetter more often than one with a crawlspace. So, the frequency is higher (water gets in the first floor at a 5 year event vs. getting into the first floor of a crawl space home starting at the 25 year event) and the damages are greater (water is deeper, possibly getting to electrical outlets, etc). We tally up the estimated damages and annualize them. The tally is based on the home's structural value and then a % for its contents. Each home gets a damage dollar amount. If a home is getting some damage, possibly water in the crawlspace with duct work damaged, but not enough to justify the costs to raise the structure, it would not have been included.



Guidelines To Help Decide Whether To Participate

1. This program is **VOLUNTARY**. You do not have to participate. You do not have to sign a contract until, and unless, you are satisfied on all matters, and understand the program thoroughly.
2. Work closely with the prospective contractors so that the estimates represent plans that you are satisfied with. If a prospective contractor is not willing to conform to your requirements or USACE criteria, seek another contractor.
3. We can only pay for work directly related to raising your home and restoring its appearance. If you want to use this opportunity to perform some discretionary work (e.g. enlarge a room, finish a garage, or fence a backyard) you will need to work those details and payments out directly between you and the contractor.
4. The USACE cannot pay for estimates. If the contractors cannot estimate the work free of charge, you will have to reimburse them directly for that cost. Be sure to ask if the estimate is free before you request it.
5. Since the agreement will be between the USACE and homeowner, and not the contractor, we cannot be responsible for their performance. Be sure to inquire about insurance, bonding, repair of any damages, warranty, etc., so you'll know up front what your options are. You may also want them to furnish references from previous jobs.
6. The USACE will provide as much assistance and guidance as possible. We want you to be satisfied with the work and with your decision.



Frequently Asked Questions

Administrative and Misc. Questions:

- FEMA has a couple of comprehensive publications for their home raising program: Homeowner's Guide to Retrofitting FEMA P-312 and Engineering Principles and Practices FEMA P-259. Does the USACE have any similar publications?
 - USACE currently does not have similar publications.
- How is the construction work authorized?
 - After the study is completed and approved, the Corps and the City would sign a Project Partnership Agreement (PPA) to implement the project. Once the PPA is signed and funds are received, the Corps and City will begin the implementation of the project.
- How are the FEMA floodplain regulations and home insurance affected after the home raisings?
 - An Elevation Certificate preparation can be included in the scope of work for the lifting contractor. Or homeowner will need to hire a licensed surveyor and obtain a new Elevation Certificate to submit to FEMA.
- Timeframes – Homeowner program participation deadlines, funding, contractor quotes, and construction phasing's?
 - A better schedule will be developed once the study/project is approved and funded. A follow up meeting with the homeowners will be held prior to starting the project.
- What about ADA accessibility? Can ADA ramps or even elevators be installed to help with those in need, and included within the program costs?
 - Ramps can be installed as part of the program on an as needed basis. Elevators would not be covered. The homeowner will be responsible for the cost of installing an elevator.
- The feasibility study said our house needed to be raised 9 feet—is this figure from the ground or where our house currently sits?
 - The height to raise is calculated from the first floor elevation.
- How soon can we initiate this process, given we would like to participate? I am going to talk to my bank, however, we are thinking we will want to do this. If that is the case, we will want to move quickly.
 - There will be multiple check-in points throughout the process. The schedule is dependent on receiving federal funding. There would be at least 6-9 months for the homeowner to obtain funding.



Frequently Asked Questions

Financial Questions:

- How do homeowner 3rd party financing/ mortgages handle invoicing and payment to the USACE?
 - Homeowners will not be paying USACE. The USACE and City of Franklin will make arrangements to pay the homeowner, with the check payable jointly to the homeowner and the contractor.
- Financial assistance from the City for retiree on social security? Can the City help homeowners who have trouble paying for the program costs, by assessment or property lien?
 - The City has not yet discussed any possibility of financial assistance, as in special assessments or property liens. If you have any specific requests for assistance, contact the City Engineering Department.
- How is the construction work paid for? How does contractor get paid?
 - USACE and the City will facilitate the payment. USACE will inspect the work to ensure the lifting met the requirements prior to approving the final USACE payment. The City will close out all building and floodplain permits before approving the final City payment.
- Does the USACE or City help with upfront contractor deposit costs?
 - The USACE is not able to front any costs and can only pay for completed work. The homeowners and contractors will have to negotiate on how the contractor gets paid.
- What about construction overrun costs?
 - The overruns will be handled on a case-by-case basis for approval.
- It says in the resolution that the USACE agrees to pay for relocation/temporary housing costs—assuming this will mean a hotel room while the house is unable to be lived in?
 - Temporary housing will be provided and paid for by the contractor. It will be part of the overall construction cost.



Frequently Asked Questions

Financial Questions Continued:

- What is included in the home raisings estimate?
 - The home estimate includes the cost of raising the home (by a certified home raiser), the construction of new foundation (cinder block or brick), the reconnection of utilities & duct work, and restoration of landscaping/grass, etc. There is also the cost of temporary housing for up to 3 months. The duration of the temp housing depends on the construction duration and local codes on habitation.
- Is there a contingency built in the estimate?
 - Yes, there is 24% contingency built in. We do market research on actual costs and include some contingencies along with longer than expected temp housing costs.
- Will the homeowner be responsible for 17.5% of the average cost of lifting all homes or the cost of his own home?
 - The Homeowner is responsible for 17.5% of the construction costs to their own home raising, not averaged out.
- When will the homeowner be responsible for paying his share of the costs?
 - The USACE will pay their 65% share to the homeowner/contractor once the construction is complete. The City's 17.5% and homeowner's 17.5% shares will be paid separately, apart from the USACE payment. The City will develop the procedures for these separate payments later in 2019.
- If items must be removed from home for lifting, is that a covered expense?
 - Items are not required to be removed for lifting. It will be at the discretion of the homeowner to secure anything they think may be at risk for damage.



Frequently Asked Questions

Construction and Contractor Questions:

- Who will be the Designer for the project? Are we responsible for hiring an architect? As you can imagine, if we need to raise the house 9 feet it is going to have a different look to it.
 - The homeowner may hire an architect if they desire so, however the lifting contractor should be able to have designers/subcontractors to ensure the final look of the home is adequate.
- How are the contractors selected?
 - USACE approves of a select group of licensed contractors, with whom the homeowner can select and request quotes.
- Does the homeowner contract directly with the contractor?
 - Yes, from a pre-qualified list of contractors.
- Are homeowners responsible for getting bids to raise the house?
 - Yes, the homeowner will acquire 3 bids from a pre-qualified list of contractors.
- Do homeowners have to use the lowest quote/bid?
 - As long as the chosen bid is within the 25% of USACE independent estimate for the home raising.
- Can the homeowner choose an approved contractor based off past relationships, reputation, or reviews?
 - A list of pre-qualified contractors will be provided. A homeowner may suggest a contractor for inclusion on the list, however it will be up to USACE to deem if the contractor has all the qualifications and experience to perform the work.
- Will the lifting contractor act as the general contractor?
 - Yes. One contractor will be hired to perform the work and could have subcontractors for different tasks.
- What is all included in these costs? As an example, our house has both crawl space and slab, will they be able to lift both?
 - The contractor's engineer will determine the best technique for lifting the home. Homes with both crawl space and slabs can be lifted. The costs include lifting, the new foundation and exterior brick/siding, site restoration, and stairs/ramps if needed.



Frequently Asked Questions

Construction and Contractor Questions Continued:

- Assuming they will jack the house up, then add foundation below to it before setting the house back down off the jacks—will the cost include adding brick to the new structure?
 - The construction cost includes the lifting, building the new foundation and matching the existing siding on the exterior. Any disturbed landscaping will be also restored.
- Can home be lifted with brick on it?
 - Yes, the exterior material will be matched to the existing when enclosing the space underneath the home.
- Our current structure has a slab porch on the front of the house where the front door is—will this be lifted too? If not, we are going to have a 9-foot lift to get to our front door that does not currently exist.
 - The contractor will determine how to lift the front porch. If it cannot be lifted, a new porch, stairs or ramps would be built.
- Will there be a schedule for lifting the homes or will it be up to the lifting contractors?
 - It will depend on home owner's readiness (covenants and agreements being signed, etc.). The actual work schedule will be determined by the contractor.
- Does USACE have final approval on items for lifting? Will everything be approved prior to beginning the raising?
 - Only the residential home will be approved for lifting. Detached non-residential structures will not be lifted as part of the project. USACE will approve a list of contractors deemed qualified to perform the lifting of homes. USACE staff will inspect completed work for quality and meeting the height requirements.
- What are the building permit requirements? Does the contractor perform all of this for the homeowner?
 - City building and floodplain permits are required through the City's Building and Neighborhood Services Department. The contractor can obtain the permits and include the permit costs in to their construction estimate.
- Will homes need to be upgraded to current zoning codes? If so, will we know what needs to be done before we commit to lifting?
 - The contractors will have to factor all Zoning Ordinance requirements in to their work.



Future Program Steps (How We Move Forward To Construction)

- **Fall 2019**
 - The USACE obtains final study approvals
- **Fall/Winter 2019**
 - Project Partnership Agreement (PPA) is executed between the USACE and the City
 - USACE and City both obtain program funding allocation
 - Formal letters and/or meetings with eligible homeowners to initiate construction phase agreements
- **Winter 2019 / Spring 2020**
 - Construction agreements between the homeowners and the USACE/City are finalized
 - USACE develops pre-qualified contractors list for homeowners
 - Homeowners could initiate any financing/mortgage assistance
- **Summer 2020**
 - Homeowner obtains contractor proposals for work (at least 3 estimates)
 - Homeowner secures funding or financial assistance (if needed) for their 17.5% project responsibility
 - USACE reviews proposals and authorizes work to begin
- **Fall 2020 – Spring 2021**
 - Construction Phase – typically 30 to 90 days per house



QUESTIONS?

CITIZEN COMMENTS

THANK YOU FOR YOUR TIME, ATTENTION, AND PARTICIPATION!

Project Contacts	Phone Number
William Banks, City Project Manager	(615)-550-6677 or (615)-791-3218
Ramune Matuliauskaite, USACE	(615)-736-7853

