

MRBC Voluntary Floodproofing Cost-Share Assistance Program

PROJECT: Single story, “L”-shaped, slab-on-grade Ranch Home located in the Floodway-Fringe of Little Cedar Creek in southeastern Noble County suffered Flood Damages three (3) times from 1989—1996. This Repetitive Loss structure was constructed before the Special Flood Hazard Area had been identified. Prior to 1989, this property had never flooded.

Land-use Changes: A new dual-lane highway was constructed to the west of this structure in 1989 and has contributed to the flooding frequency. The amount of impervious area was drastically increased, drainage patterns were changed, and the storm water runoff is concentrated into a small tributary running behind the structure and ultimately discharging into Little Cedar Creek. Additionally, upstream development in the Town of Avilla, have contributed to the amount of runoff flowing in Little Cedar Creek, forcing it to spew over its banks and flow directly towards the subject structure.

Mitigation Choices: Acquisition and Floodproofing. **Floodproofing** was chosen over acquisition based on a higher cost-benefit ratio.

Elevation Project Cost: + \$90,000.00

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| Cost-Share Funding: | FEMA Flood Mitigation Assistance (FMA) Grant | - \$48,750.00 | 52% |
| | MRBC Floodproofing Program Grant | - \$ 5,000.00 | 5% |
| | Homeowner Cost share | - \$ 40,000.00 | 43% |



Repetitive Loss Structure with sandbags still visible. Three (3) NFIP claims filed in a ten year period. Average annual flood damages: +/- \$20,000.00.



Preparing for “Lift-Off”. A total of ten (10) hydraulic forklifts were used to lift this “slab on grade” structure. Structure’s “L-shaped” configuration contributed to the difficulty in this elevation project.



Following examples from the Baton Rouge, Louisiana area, the homeowners chose to lift the structure a total of eight feet (8’). Flood Protection requirements called for elevating the structure +/- five feet (5’). **Note:** The enclosed area below the structure **SHALL NOT** be converted to living space per Federal Regulations. Homeowner’s were required to sign a “Deed Restriction”.



Flood Vents were place within one foot (1’) of the ground. A total of ten (10) Flood Vents were installed to meet FEMA requirements. SMART VENT flood vents were used in this project as they have been approved by FEMA for placement in the walls of enclosed areas. MRBC reserves the right to perform an annual inspection of this home to ensure that vent openings are free of obstruction.



Supporting foundation was constructed using “Insta-form” foundation system blocks. The Styro-foam blocks inter-lock with each other with structural webbing to add strength. Concrete is poured in the forms. Walls have a very high “R” value. **Note:** “Blue Rectangles” are block-outs for FEMA approved Flood Vents to allow floodwater to flow through the structure.

Project Completed! Risk of future flood damage is reduced to “zero”. **Note:** Homeowners are still required to carry Flood Insurance. Flood Insurance Policy was reviewed by FEMA as a “Submit For Rate” since the structure was elevated over two feet above Flood Protection Grade. Low risk = Lower insurance premium.