

# 2019 State of Nebraska Disaster Damage Assessment Packet



Photo courtesy of the Office of Governor Pete Ricketts

**NEBRASKA**  
DEPT. OF NATURAL RESOURCES

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# Steps to Take Following any Flood, Tornado, Fire, or Disaster

All floodplain management ordinances in the State of Nebraska require permits for the repair or reconstruction of damaged structures. The local floodplain administrator must ensure that the repair of a damaged structure within the community's Special Flood Hazard Area (SFHA) meets the requirements of the floodplain management ordinance.

Following any sort of event, the local administrator should follow these five steps:

**Step 1: Contact the Floodplain Management Section of the Nebraska Department of Natural Resources (NeDNR) or the Federal Emergency Management Agency (FEMA).**

Both agencies have experience, materials, and guidance to help you carry out your floodplain management responsibilities. Make use of their help and expertise! NeDNR (402) 471-2363 or FEMA: (816) 808-5281.

**Step 2: Post information about the local ordinance requirements for obtaining permits for repairs and rebuilding for the public to see.**

Often community members will want to begin repairs on damaged buildings as soon as possible after a disaster so it is very important that this step take place as early as possible. To deliver the message, you can make social media posts, post signs or flyers around your community, place notices on damaged structures, put up door hangers, make press releases, and/or mail letters to individual owners. Educate yourself on the damage assessment process, reconstruction methods, and available mitigation programs. Have a "Floodplain Development Permit Application" in hand and ready to distribute. Keep it simple. Be prepared for residents who are angry that they cannot start immediate repairs.

**Step 3: Identify those structures believed to be substantially damaged and begin doing damage assessments.**

Local officials should tour the flooded areas of the SFHA and identify every structure which has been affected, as well as those with obvious structural damage.

- Damaged buildings should be marked on a community map and photographed for future reference.
- Tag each structure with the notice included in this packet so residents are aware of the post-disaster permit requirements. A sample press release is also included with this packet.

Damage assessments can be difficult. The most common method for initial assessments is to view a structure from the street and estimate the level of

damage based on the high water mark or other characteristics. Some community members may disagree with this initial estimate and invite the community official to enter their property for a more thorough inspection. Another method for a more detailed determination is to request that property owners provide a contractor's estimate for repair costs along with their repair permit application. Then, community officials can compare the estimated cost to repair with the pre-disaster market value of the structure. The pre-disaster market value of every impacted structure can be quickly estimated from the County Assessor's records. Additionally, the FEMA Substantial Damage Estimator 3.0 software program is available free to help make these determinations. See page 8 for further information.

**Step 4: Provide technical information to residents on Increase Cost of Compliance (ICC) coverage, elevation and flood proofing techniques.**

Post-disaster recovery presents the perfect opportunity to implement mitigation measures that reduce the impact of future hazards. FEMA research shows that every dollar invested in hazard mitigation provides a six dollar return on investment. Federal or state mitigation programs are often available. The Nebraska Emergency Management Agency at (402) 471-7421 or the Nebraska Department of Natural Resources at (402) 471-2363 can provide you with information, technical assistance, and guidance on mitigation actions. Public meetings can be held in impacted communities to introduce flood victims to the various options available to them. See page 6 for further information.

**Step 5: Implement a permit application procedure.**

Those structures identified as substantially damaged (more than 50% of the pre-flood market value) should be "red-tagged". Permits should not be issued until compliance with the local floodplain ordinance is demonstrated. Those with less than 50% damage can be issued floodplain development permits and begin repairs immediately. Document that the damages were less than 50% and keep that documentation on file with your permits. Note the damage percentage on the permit form.

## Substantial Damage “The 50% Rule”

Communities participating in the National Flood Insurance Program (NFIP) have adopted, and are expected to enforce their floodplain management ordinance. New residential structures located in a floodplain must be elevated to at least one foot above the base flood elevation, depending upon the requirements of the community’s floodplain management ordinance. Some communities require more than one foot so check your local regulations. Floodproofing options exist for non-residential buildings. The same flood protection and elevation regulations also apply to substantially damaged buildings.

**SUBSTANTIAL DAMAGE.** Whenever a building located in a Special Flood Hazard Area on the community’s Flood Insurance Rate Map (FIRM), is damaged from any source (flood, fire, seismic activity, wind, or human activity), the community must determine if that structure is substantially damaged. A building is substantially damaged when the cost of repairs is 50% or more of the structure’s pre-damaged market value.

If the building is found to be substantially damaged, the structure must be brought into compliance with the community’s floodplain ordinance (in other words, protected from future flooding to at least one foot above the base flood elevation).

The cost of repairs must be calculated for full repair to pre-damaged condition, even if the owner elects to do less, such as not finishing a basement that was finished pre-disaster. The total cost of repair includes structural and finish materials as well as labor. This must also include property owner and volunteer labor as well as any donated materials.

**CUMULATIVE COST.** If standards for cumulative improvement are adopted in a community’s floodplain management ordinance, substantial damage occurs at the point where multiple damages or improvements total 50% of the original market value of the building. This would include a remodel project that happened months before the disaster event.

**MARKET VALUE.** Market value refers to the market value of the structure only; land and exterior improvements (pools, pool houses, landscaping, walkways, etc.) are excluded.

Following a disaster, most communities find that it expedites the process to obtain the structure’s market value from the County Assessor. This method of obtaining market value ensures consistency. It is a good starting point and can be appealed later.

Other acceptable methods of estimating market value include:

- Independent appraisals by a Nebraska professional appraiser.
- Detailed estimates of the structure’s Actual Cash Value (replacement cost minus depreciation).
- Qualified estimates based on sound professional judgment made by staff of the local building department.

**DETERMINATION OF EVENT DAMAGE – COST OF REPAIR.** Substantial Damage refers to the repair of all damage sustained and CANNOT reflect a level of repair that is LESS than the amount of the damage sustained. If the 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 full pre-damage condition will constitute Substantial Damage.

**COSTS THAT MUST BE INCLUDED IN SUBSTANTIAL DAMAGE/SUBSTANTIAL IMPROVEMENT DETERMINATIONS:**

- Materials and labor, including the estimated value of donated or discounted materials and owner or volunteer labor.
- Site preparation related to the improvement or repair (e.g., foundation excavation or filling in basements).
- Demolition and construction debris disposal related to removing structure walls, floors. This should NOT include cleanup or disposal of contents.
- Labor and other costs associated with demolition of the structure
- Costs associated with maintaining compliance with other codes or regulations, including 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 tax on materials

**Residential Structure 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-load-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

**COSTS THAT MAY BE EXCLUDED FROM SUBSTANTIAL DAMAGE/SUBSTANTIAL IMPROVEMENT DETERMINATIONS:**

- Clean-up and trash removal (e.g., cost of draining a basement, removing dirt and mud, and cleaning and drying out buildings)
- 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 re-carpeting installed over finished flooring such as wood or tile
- 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 documented violations of health, safety, and sanitary codes
- Plug-in appliances (e.g., washing machines, dryers, and stoves)

**Guidance from Substantial Improvement/Substantial Damage Desk Reference – FEMA P-758, May 2010, P. 4-5, 4-6, 4-7**

# Protect Your Home from Future Flood Damages

Under the NFIP, the Increased Cost of Compliance (ICC) program may provide additional financial assistance to either elevate or remove flood-damaged structures from the floodplain. The ICC applies to flooded structures that are substantially damaged. It provides funding for a suite of measures often known as FRED (floodproofing, relocation, elevation, or demolition).

The two most common types of ICC mitigation used are:

## **Relocation:**

Relocating structures to higher ground or purchasing flood prone property is the safest way to protect against flooding and reduce the liability and cost to the community. Relocation can be expensive, but in the long-run is not as costly as repetitive flood damages and high flood insurance premiums.

## **Elevation:**

There are four methods used to elevate a structure:

Construction on vented crawlspace



Elevation on post, piers, etc.



Elevation on compacted fill.



Elevate house above a vented garage



The elevation method is dependent on the base flood elevation, structure's condition, flood hazard, local floodplain regulations, and owner's financial condition. When elevating, it is essential for all utilities (air conditioner, water heater, furnace, etc.) to be elevated to or above the Base Flood Elevation.



**Owners who have standard flood insurance coverage have paid for and are eligible to receive ICC benefits** if the local official determines that a structure located in a Special Flood Hazard Area has been substantially damaged by a flood or cumulatively damaged by flooding beyond 50% of the value of the structure when the damage occurred.

ICC does not normally cover buildings in B, C, X, or D Zones. However, if the community can document that it is regulating an area outside of the Special Flood Hazard Area (advisory or preliminary BFEs provided by FEMA); ICC will be available.

For more information, visit:

<https://www.fema.gov/media-library/assets/documents/12164?id=3010>

## FEMA Substantial Damage Estimator (SDE 3.0)

The SDE 3.0 Tool was developed by FEMA to assist State & local officials in determining substantial damage for residential & non-residential structures in accordance with a local floodplain management ordinance meeting the regulatory requirements of the National Flood Insurance Program (NFIP). The tool can be used to assess flood, wind, wildfire, seismic, and other forms of damage. The SDE tool is based on the concept of using damage estimates for individual structure elements to determine whether the structure as a whole is substantially damaged. It allows community officials with limited appraisal or construction backgrounds to develop reasonable estimates of structure values and damage in accordance with the NFIP requirements.

Using SDE 3.0 will save you time and research in a busy post-disaster work environment. The SDE 3.0 can be downloaded directly from the FEMA website:

<https://www.fema.gov/media-library/assets/documents/18692>

The zip-file contains all of the items you need to load SDE 3.0 as well as the manuals listed on the website download page. This includes the installation guide, which will provide answers to installation questions that have not been included in this packet.

If you have any further questions or concerns, please contact Jake Bruihler at (402) 471-2240 or [jacob.bruihler@nebraska.gov](mailto:jacob.bruihler@nebraska.gov) or Chuck Chase at (402) 471-9422 or [chuck.chase@nebraska.gov](mailto:chuck.chase@nebraska.gov).

## INSTALLATION STEPS

Prior to installing the SDE 3.0 Tool, users are encouraged to export and save any existing SDE data from previous versions of the SDE tool. Although it is not required, FEMA recommends that users uninstall previous versions of the SDE tool from the host computer using the Windows Add/Remove Programs function to avoid confusion between past and current SDE inventories. Installation steps may vary depending on the host computer setup and the utility program installed on the computer to unzip the SDE tool installation file downloaded from the FEMA website.

Use the following steps to install the SDE 3.0 Tool using a zip file downloaded from the FEMA website:

**USER NOTE:** A host computer can only have one installation of the SDE tool.

1. After opening the FEMA website (<http://www.fema.gov>), search on “SDE” or use the SDE web page found at <https://www.fema.gov/media-library/assets/documents/18692> to locate the SDE tool download function.
2. Download the SDE installation zip file to the My Documents folder on the host computer and unzip the file. In many cases, users can unzip the folder by right clicking on the file and selecting the option **Extract All ...** from the list of options or by double-clicking the zip folder and selecting the option **Extract all files** from the list of choices displayed. Some users may have an unzip utility installed that activates automatically when they select a zipped folder or file.
3. If the .NET Framework 4.6.1 is not already installed, the SDE installation routine will attempt to search online for the Framework and install it on the host computer during the SDE 3.0 installation. **Local administrative rights and an Internet connection are required to install the .Net Framework 4.6.1.** The user will need to accept the Framework license agreement (Figure 1) for the installation to continue.
4. After the SDE file has been extracted, open the folder and double click on the “Setup.exe” file to start the tool installation process. The Setup Wizard window shown in Figure 2 will appear.
5. Select **Next** button to continue the installation.
6. The Select Installation Folder window will appear next. This window allows the user to proceed with installation in the default location or change the destination folder. After the destination folder is identified, select **Next** to continue.
7. When the Confirm Installation window appears, the Setup Wizard is ready to proceed with the SDE installation on the host computer. Select **Next** to continue.
8. The installation status window will show the status of the installation process. When the status bar reaches 100%, select **Next** to continue.

9. Once the installation is complete, select Close to end the installation process.
10. Upon completion of the installation, an SDE icon will appear on the desktop of the host computer. Double-click the icon to run the SDE tool.

## **THE SDE “CHEAT SHEET”**

The SDE requires the inspector to estimate the percent of damage for various building components. The information compiled below can be used with the SDE worksheet to quickly calculate substantial damage. It is intended to be used as a screening tool so that the property owner is notified as soon as possible as to the potential status of his property. Often a more detailed assessment is warranted and more detailed damage percentages should be determined on an as-needed basis.

- **Foundation** – *These numbers can be revised downward if the inspector is reasonably assured no damages have occurred.*
  - **Basement or crawlspace masonry foundations-**
    - 10% if minor hairline cracks and fractures or cosmetic (clean up, re-seal, paint, etc.)
    - 50% if cracked, bowed, or fractured on one or more walls
    - 100% if structural damage such as blow out or caved in walls
  - **Slab on Grade Foundations –**
    - 10% damage unless the foundation is undermined.
    - 30% if foundation is undermined
    - 75% if foundation is broken or bowed
  - **Joist and Pier Foundations**
    - 15% damage – for water depths exceeding height of floor
    - 100% damage where building has moved from foundation

*These criteria are based on foundations that are substantially intact and do not include damages caused by subsidence or shifting of the foundation. In some cases, hydrodynamic forces have caused an upheaval in slab on grade foundations. In this circumstance, individual assessment will be required.*

- **Superstructure**
  - **Walls**
    - 10% for water depths of 2 feet or less
    - 25% for water depths of 2 to 4 feet
    - 75% for water depths of more than 4 feet
  - **Structural damage resulting from wind or impact damage**
    - Lineal feet of damage divided by total lineal feet of wall will equal percentage
  - **Roof damage**
    - Total square feet of roof damage divided by square footage of house will equal percentage
  - **Insulation and Weather-stripping**
    - 30% if waters less than 4 feet

- 60% if waters greater than 4 feet but less than ceiling height
- 100% if water above ceiling height
- **Exterior Finish**
  - 30% if waters less than 4 feet
  - 60% if waters greater than 4 feet but less than ceiling height
  - 100% if water above ceiling height

*These numbers are based on hydrodynamic forces acting on the exterior walls of the structure. Some brick or brick veneer structures may have actual damages less than those shown.*

- **Interior Finish** - *based on interior finishes susceptible to flood damage*
  - 30% if waters less than 4 feet
  - 60% if waters greater than 4 feet but less than ceiling height
  - 100% if water above ceiling height
- **Doors, Windows and Shutters**
  - 50% if waters greater than 2 inches
  - 75% if waters greater than 4 feet
  - \$ 70.00 per individual window when other damage occurs
- **Lumber Finished**
  - 50% if water greater than 1 inch
  - 100 % if waters exceeding 4 feet
- **Hardware**
  - 100% if waters exceeding 4 feet
- **Cabinets and Countertops**
  - 20% if waters less than 3 inches
  - 70% if waters greater than 3 inches less than 4 feet
  - 100% if water exceeding 4 feet
- **Floor Coverings**
  - 100% if waters greater than 1 inch
  - 20% for ceramic tile, brick, or concrete floors
- **Plumbing**
  - 5% if waters less than 2 feet
  - 30% if waters between 2' and 4 feet
  - 50% if waters greater than 4 feet if the fixtures are not reused

*Floodwater will rarely damage plumbing pipes so this schedule is based on the cost of plumbing fixtures and the labor to install them.*

- **Electrical**
  - 10% if waters greater than 2 feet and less than 4 feet
  - 50% if waters greater than 4 feet and less than ceiling

- 100% if waters greater than ceiling height

*Some communities require the wiring to be replaced if they were exposed to flood waters. This schedule reflects replacement of fixtures and minimal wiring.*

- **Built in Appliances**
  - 100% if waters more than 3 feet
- **Heating and cooling**
  - 30% if waters less than 3 feet
  - 60% if waters greater than 3 feet but less than ceiling height
    - *If A/C unit is located in the attic this number will be reduced to 30%*
  - 100% if waters greater than ceiling height
- **Painting**
  - 20% if waters less than 4 inches
  - 50% if waters less than 4 feet
  - 100% if waters greater than 4 feet

*Reflects interior and exterior painting of the surfaces in contact with the water and areas where the surfaces are replaced due to damage. This category also includes finishing of doors and trim that may have been replaced.*



# **Sample Letters, Forms and News Releases**



## SDE Residential Worksheet

Community Identification Number (CID) \_\_\_\_\_ Inspector Name \_\_\_\_\_

Team # \_\_\_\_\_ Photo # \_\_\_\_\_ Date \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

County: \_\_\_\_\_

### STRUCTURE ATTRIBUTES

**Residence Type:**  Single Family  Town or Row House  Manufactured House

**Story:**  One Story  Two or more stories

**Foundation:**  Continuous Wall w/Slab  Basement  Crawlspace  
 Piles  Slab-on-grade  Piers and Posts

**Superstructure:**  Wood-Framed  Steel-framed  Common Brick  Masonry  
 Insulated Concrete Forms (ICF)

**Roof Covering:**  Shingles – Asphalt, Wood  Metal (Standing Seam)  Clay Tile  Slate

**Exterior Finish:**  Siding or Stucco  Brick Veneer  Exterior Insulated Finishing System (EIFS)  None

**HVAC System:**  None  Heating and Cooling

**Quality:**  Low  Average  Good  Excellent

### **Depreciation Rating:**

- 1 - Very Poor Condition
- 2 - Requires Extensive Repairs
- 3 - Requires Some Repairs
- 4 - Average Condition
- 5 - Above Average Condition
- 6 - Excellent Condition

### INFORMATION EXCLUSIVELY FOR SUBSTANTIAL DAMAGE ESTIMATE ASSESSMENTS

Year of Construction: \_\_\_\_\_ Date Damage Occurred: \_\_\_/\_\_\_/\_\_\_

Cause of Damage:

- Fire
- Flood
- Flood and Wind
- Seismic
- Wind
- Other

ELEMENT PERCENTAGES

Foundation \_\_\_\_\_ % Superstructure \_\_\_\_\_ %

Duration of Flood: \_\_\_\_\_

- Hours
- Days

Roof Covering \_\_\_\_\_ %

Floor Finish \_\_\_\_\_ %

Exterior Finish \_\_\_\_\_ %

Plumbing \_\_\_\_\_ %

Doors and Windows \_\_\_\_\_ %

Electrical \_\_\_\_\_ %

Cabinets & Countertops \_\_\_\_\_ %

Appliances \_\_\_\_\_ %

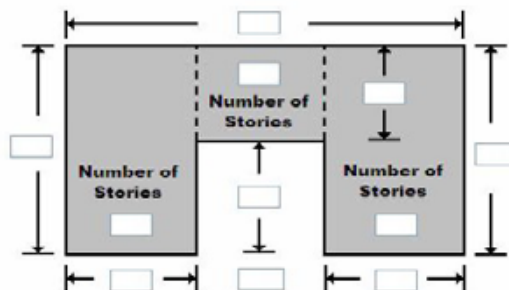
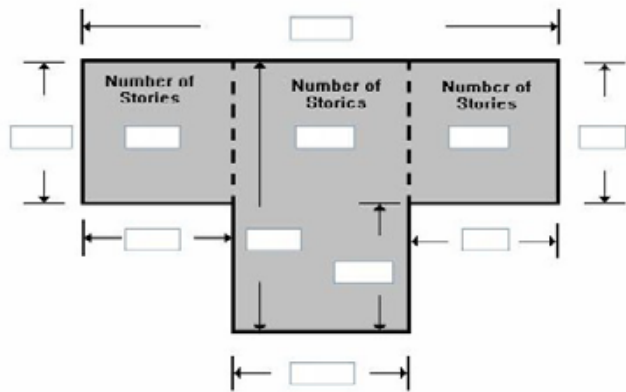
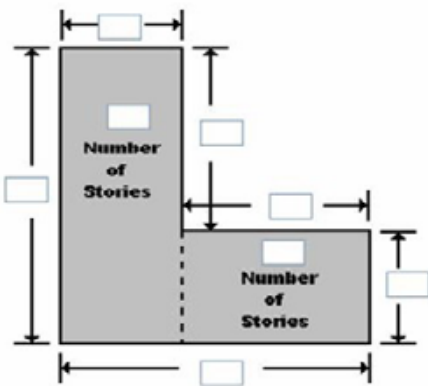
Flood Depth of Flood Above Ground: \_\_\_\_\_

Interior Finish \_\_\_\_\_ %

Flood Depth of Flood Above 1st Floor: \_\_\_\_\_

HVAC \_\_\_\_\_ %

DIAGRAM W/ MEASUREMENTS AND NUMBER OF STORIES



### SDE Non-Residential Worksheet

Community Identification Number (CID) \_\_\_\_\_ Inspector Name \_\_\_\_\_

Team # \_\_\_\_\_ Photo # \_\_\_\_\_ Date \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

County: \_\_\_\_\_

**Story:**  One  Two thru Four  Five or more

**Structure Use:**  Apartments  Auditorium  Commercial Retail  Convenience Store  Courthouse  Dept. Store  Elementary School  Fast Food Restaurant  Fire/Police Station  High School  Hospital  Hotel  House of Worship  Industrial  Long-Term Care Facility  Mini-Warehouse  Motel  Municipal Building  Office Building  Restaurants  Strip Mall  Other  
Specify Other: \_\_\_\_\_

**Cause of Damage:**

- Fire
- Flood
- Flood and Wind
- Wind
- Other
- No Damage

Duration of Flood: \_\_\_\_\_  
 Days  
 Hours

Depth of Flood Above Ground: \_\_\_\_\_  
Depth of Flood Above 1<sup>st</sup> Floor: \_\_\_\_\_

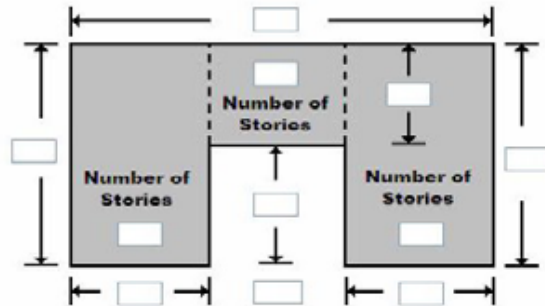
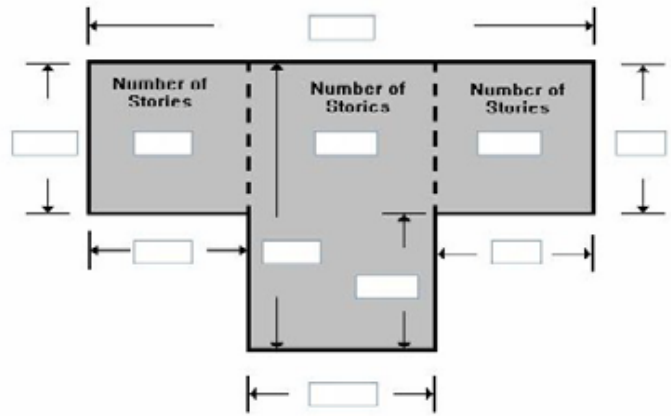
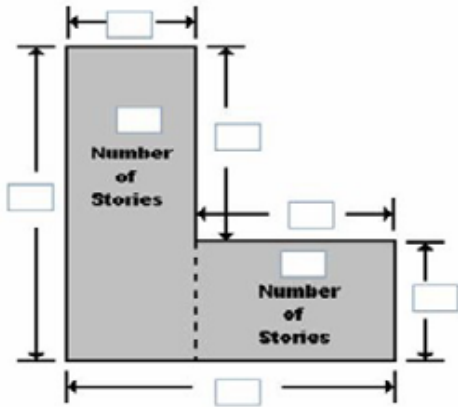
**Sprinkler System:**  Yes  No

**Conveyance (Elevator/Escalator):**  Yes  No

**Quality:**  Low  Good  Average  Budget  Excellent

Year of Construction: \_\_\_\_\_ Date Damage Occurred: \_\_\_\_/\_\_\_\_/\_\_\_\_

DIAGRAM w/ MEASUREMENTS and NUMBER OF STORIES:



Foundation\_\_\_\_\_%  
 Superstructure\_\_\_\_\_%  
 Roof Covering\_\_\_\_\_%  
 Plumbing\_\_\_\_\_%

Electrical\_\_\_\_\_%  
 Interiors\_\_\_\_\_%  
 HVAC\_\_\_\_\_%

MISC NOTES:

**Sample Floodplain Development Permit**

\_\_\_\_\_  
Permit Application #

**DEVELOPMENT PERMIT/APPLICATION**

\_\_\_\_\_  
Date

This form is used for any man-made change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials.

Developer must obtain all other necessary federal, state, or local permits (e.g. Corps of Engineers 404 Permit, Local Levee District, etc.)

1. **Name of Applicant:** \_\_\_\_\_  
**Address:** \_\_\_\_\_

2. **Type and Use of Development:** \_\_\_\_\_

3. **Specific Location of Development:** \_\_\_\_\_

4. Complete this section if the proposed development involves the improvement of a structure (i.e. walled and roofed building, manufactured home, or gas and liquid storage tanks):  
**Pre-Improvement Value of Structure \$** \_\_\_\_\_  
**Cost of Improvement: \$** \_\_\_\_\_

The Following Section is to be Completed by the Community Official:

5. **Is the development Substantial Improvement? (see #4)**  YES  NO

6. **Is the development in an identified floodplain?**  YES  NO  
If YES, complete the following:

a. Elevation of the Base (100-Year) Flood \_\_\_\_\_ ft. MSL/NGVD 29  
OR  
NAVD 88

b. Elevation/Floodproofing Requirement (if applicable) \_\_\_\_\_ ft. MSL/NGVD 29  
OR  
NAVD 88

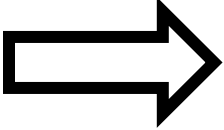
c. The developer may be required to submit hydraulic data demonstrating that the proposed development will not increase flood heights more than one foot at any location.

If the development is in a floodplain, the following shall apply:

This permit is issued with the condition that the lowest floor (including basement floor) of any new or substantially improved residential building will be elevated at least one foot above the base flood elevation. If the proposed development is a nonresidential building, this permit is issued with the condition that the lowest floor (including basement) of a new or substantially improved nonresidential building will be elevated or floodproofed at least one foot above the base flood elevation. The Developer/Owner will provide certification by a registered Engineer, Architect, or Land Surveyor of the "as-built" lowest floor elevation (including basement) or floodproofed elevation of any new or substantially improved building covered by this permit.

All provisions of the \_\_\_\_\_ Floodplain Management Resolution/Ordinance (Number \_\_\_\_\_) shall be complied with  
(County or City)

\_\_\_\_\_  
Signature of Developer/Owner      \_\_\_\_\_  
Date      \_\_\_\_\_  
Authorizing Official (Name & Title)      \_\_\_\_\_  
Date

 **NOTICE** 

**Because this building is located in a floodplain and was damaged by \_\_\_\_\_ (Fire, Flood...), a damage assessment must be conducted by the (city or county).**

**Before occupying this building or doing any repair work you must call the (city or county) community's Floodplain Administrator at (\_\_\_\_) \_\_\_\_\_ to schedule an inspection.**

**Failure to obtain reconstruction approval may result in a penalty.**

## **Sample Press Release**

### **RESIDENTS IN (COMMUNITY) WITH DISASTER DAMAGE REMINDED OF PERMIT REQUIREMENTS**

As property owners in (community) contemplate clean up and repairs following recent (disaster), the (community permit office) is reminding residents to obtaining local permits before repairing or rebuilding flood-damaged structures.

The permits are required as part of local government participation in the National Flood Insurance Program, providing eligibility for flood insurance, flood disaster assistance, state and federal grants and loans, and buyout funds for flood-prone property.

Local floodplain management ordinances require that permits be obtained for any construction or development activity in a floodplain area, including the repair or reconstruction of structures damaged by a disaster.

Special conditions apply to substantially damaged buildings - those in which the total cost of repairs is 50 percent or more of the structure's pre-disaster market value. If a building is found to be substantially damaged, regulations require that repairs not begin until compliance with the local floodplain ordinance is demonstrated. In some cases, that may require repairs that include elevating or flood proofing the structure to reduce the potential for future flood damage.

The cost to repair must be calculated for full repair to "pre-damaged" condition, even if the owner elects to do less. The total cost to repair includes structural and finish materials as well as labor. If labor and materials have been donated, they must still be assigned a value. If local building codes require the structure to be repaired according to certain standards, these additional costs must be included in the full repair cost for the structure.

State and federal assistance may be available to property owners to reduce the chances of future flood damage. Mitigation assistance may cover costs of relocation, or for elevating or purchasing flood-damaged structures. If damage is caused by a flood, flood insurance may also provide up to \$30,000 to protect a structure from future flooding through a claims process known as ICC (Increased Cost of Compliance). The property owner must have had flood insurance for ICC to become available.

Property owners and residents with (disaster)-damaged buildings should contact (local building, zoning or floodplain administrator) for more information on repair and reconstruction permits.

## Sample Substantial Damage Determination Letter (Flood)

Date

Property Owner Name  
Property Owner Address

Subject: Damage Estimation

Dear \_\_\_\_\_ (Sir/Madam/Name),

On \_\_\_\_\_ (date) your \_\_\_\_\_ (home/business/structure) located at \_\_\_\_\_ (address/legal description) was damaged by a \_\_\_\_\_ (flood). Your property is located in flood zone \_\_\_\_\_ (A, AE, A1-30, AH, AO). When a property in a special flood hazard area is damaged, the \_\_\_\_\_ (community name) is required to perform damage estimation in accordance with \_\_\_\_\_ (ordinance/regulation/resolution and number). The damage estimation for your property has been determined to be \_\_\_\_\_ (number percentage). This number is based on cost to repair the building to the market value before the disaster. The fair market value of your structure was determined to be \_\_\_\_\_ (dollar amount). The cost to repair is estimated to be \_\_\_\_\_ (dollar amount).

Prior to beginning repairs to your structure, please contact \_\_\_\_\_ (Floodplain Manager) for a floodplain development permit. A floodplain development permit is required. Failing to obtain a required permit is a violation of \_\_\_\_\_ (Ordinance/Resolution/Code citation). We regret your loss and the damage you have had. We will try to make the permitting process as easy as we can for you.

Because the damage to your building has been determined to be greater than 50% of fair market value your building has been determined to be substantially damaged. Substantially damaged properties are required to be brought into full compliance with floodplain regulations found in \_\_\_\_\_ (Ordinance/Resolution citation.) Residential structures must be elevated \_\_\_\_\_ (amount of freeboard) above the base flood elevation. Non-Residential structures must be floodproofed or elevated to \_\_\_\_\_ (freeboard requirement). Call this office at \_\_\_\_\_ (phone number) by \_\_\_\_\_ (deadline date) to schedule a consultation to discuss your options for bringing the building into compliance. Increased Cost of Compliance (ICC) funds could be available for those who have flood insurance through the National Flood Insurance Program (NFIP). Contact your claims adjuster for details. **(Buildings already in compliance will not qualify for ICC so do not include statements about ICC for those buildings.)**

If you disagree with the damage estimation there is an appeal process. An appeal will require additional information such as \_\_\_\_\_ (contractor's estimate/insurance adjusted claim/licensed appraisal/other). Details about an appeal and about how the damage estimation was done can be discussed in more detail by calling this office. We are sure you want to repair your property as soon as possible. It will speed things up if you contact \_\_\_\_\_ (Community Floodplain Management Office) as soon as possible.

The \_\_\_\_\_ (Community Name) participates in the National Flood Insurance Program. Failing to enforce floodplain damage requirements can put \_\_\_\_\_ (Community Name) in jeopardy of losing flood insurance, disaster assistance and federally backed loans and



grants for our citizens. Thank you in advance for your cooperation and assistance at a difficult time.

Sincerely,

Community Official  
Floodplain Manager  
Contact Information

Copy: City Attorney/County Attorney

**ATTACH WORK SHEET SHOWING HOW YOU DETERMINED THE DAMAGE PERCENTAGE WHEN ICC WILL BE USED AND STATE IF THERE IS CUMULATIVE IMPROVEMENT OR CUMULTATIVE DAMAGE REQUIREMENT IN LOCAL FLOODPLAIN REGULATIONS.**

**Sample Substantial Damage Determination Letter (Non-Flood)**

Date

Property Owner Name  
Property Owner Address

Subject: Damage Estimation

Dear \_\_\_\_\_ (Sir/Madam/Name),

On \_\_\_\_\_ (date) your \_\_\_\_\_ (home/business/structure) located at \_\_\_\_\_ (address/legal description) was damaged by a \_\_\_\_\_ (fire/tornado/other). Your property is located in flood zone \_\_\_\_\_ (A, AE, A1-30, AH, AO). When a property in a special flood hazard area is damaged, the \_\_\_\_\_ (community name) is required to perform damage estimation in accordance with \_\_\_\_\_ (ordinance/regulation/resolution and number). The damage estimation for your property has been determined to be \_\_\_\_\_ (number percentage). This number is based on cost to repair the building to the market value before the disaster. The fair market value of your structure was determined to be \_\_\_\_\_ (dollar amount).

Prior to beginning repairs to your structure, please contact \_\_\_\_\_ (Floodplain Manager) for a floodplain development permit. A floodplain development permit is required. Failing to obtain a required permit is a violation of \_\_\_\_\_ (Ordinance/Resolution/Code citation). We regret your loss and the damage you have had. We will try to make the permitting process as easy as we can for you.

Because the damage to your building has been determined to be greater than 50% of fair market value your building has been determined to be substantially damaged. Substantially damaged properties are required to be brought into full compliance with floodplain regulations found in \_\_\_\_\_ (Ordinance/Resolution citation.) Residential structures must be elevated ---- (amount of freeboard) above the base flood elevation. Non-Residential structures must be floodproofed or elevated to \_\_\_\_\_ (freeboard requirement). Call this office at \_\_\_\_\_ (phone number) by \_\_\_\_\_ (deadline date) to schedule a consultation to discuss your options for bringing the building into compliance.

If you disagree with the damage estimation there is an appeal process. An appeal will require additional information such as \_\_\_\_\_ (contractor's estimate/insurance adjusted claim/licensed appraisal/other). Details about an appeal and about how the damage estimation was done can be discussed in more detail by calling this office. We are sure you want to repair your property as soon as possible. It will speed things up if you contact \_\_\_\_\_ (Community Floodplain Management Office) as soon as possible.

The \_\_\_\_\_ (Community Name) participates in the National Flood Insurance Program. Failing to enforce floodplain damage requirements can put \_\_\_\_\_ (Community Name) in jeopardy of losing flood insurance, disaster assistance and federal backed loans and grants for our citizens. Thank you in advance for your cooperation and assistance at a difficult time.

Sincerely,

Community Official

Floodplain Manager  
Contact Information

Copy: City Attorney/County Attorney

**STATE IF THERE IS CUMULATIVE IMPROVEMENT OR CUMULATIVE DAMAGE  
REQUIREMENT IN LOCAL FLOODPLAIN REGULATIONS.**

**Sample Non-Substantial Damage Determination Letter (Any Disaster)**

Date

Property Owner Name  
Property Owner Address

Subject: Damage Estimation

Dear \_\_\_\_\_ (Sir/Madam/Name),

On \_\_\_\_\_ (date) your \_\_\_\_\_ (home/business/structure) located at \_\_\_\_\_ (address/legal description) was damaged by a \_\_\_\_\_ (flood/fire/tornado/other). Your property is located in flood zone \_\_\_\_\_ (A, AE, A1-30, AH, AO). When a property in a special flood hazard area is damaged, the \_\_\_\_\_ (community name) is required to perform damage estimation in accordance with \_\_\_\_\_ (ordinance/regulation/resolution and number). The damage estimation for your property has been determined to be \_\_\_\_\_ (number percentage). This number is based on cost to repair the building to the market value before the disaster. The fair market value of your structure was determined to be \_\_\_\_\_ (dollar amount).

Prior to beginning repairs to your structure, please contact \_\_\_\_\_ (Floodplain Manager) for a floodplain development permit. A floodplain development permit is required. Failing to obtain a required permit is a violation of \_\_\_\_\_ (Ordinance/Resolution/Code citation). We regret your loss and the damage you have had. We will try to make the permitting process as easy as we can for you.

The \_\_\_\_\_ (Community Name) participates in the National Flood Insurance Program. Failing to enforce floodplain damage requirements can put \_\_\_\_\_ (Community Name) in jeopardy of losing flood insurance, disaster assistance and federal backed loans and grants for our citizens. Thank you in advance for your cooperation and assistance at a difficult time.

Sincerely,

Community Official  
Floodplain Manager  
Contact Information

Copy: City Attorney/County Attorney

**STATE IF THERE IS CUMULATIVE IMPROVEMENT OR CUMULATIVE DAMAGE REQUIREMENT IN LOCAL FLOODPLAIN REGULATIONS.**

**Sample Right of Entry Form**

**PROPERTY OWNER’S RIGHT OF ENTRY CERTIFICATION  
AND RELEASE**

A floodplain permit is required for all construction activity in the Special Flood Hazard Area (SFHA) or that area inundated by the 1% annual chance of a flood, as designated by the National Flood Insurance Program (NFIP). These SFHAs are designated as A, AE, A1-A30, AH, or AO Zones on the Flood Insurance Rate Maps (FIRMs). This includes construction for new or improved residential and non-residential structures, filling, and excavation.

I, the undersigned, being the owner of the land and all structures located at **(address of the structure)**, Nebraska, do hereby grant the community of **(community’s name)** permission to inspect the property to determine the amount of damage and to comply with the National Flood Insurance (NFIP) Regulations for Substantial Damage Determinations according to Title 44 CFR, Section 60.3.

I, the undersigned, do hereby grant the community of **(community’s name)**, its agents, servants, employees and assigns, for a period of 60 days or the completion of the substantial damage assessment, from the date of this document, permission to enter upon the above-identified land to accomplish substantial damage/improvement determinations.

In consideration of the substantial damage assessment conferred on me by the community of **(community’s name)**, in said substantial damage/improvement determinations, I, the undersigned, do hereby release and forever discharge the community of **(community’s name)** its agents, servants, employees and assigns from any and all claims, demands, or actions for damages for any and all personal injuries, or loss or damage to property sustained in or growing out of said inspections, and from complications arising therefrom.

I also hereby agree to comply with the Community’s Ordinance/Resolution No.

\_\_\_\_\_.

It is understood that the above mentioned substantial damage assessment and the terms of the release are fully understood and voluntarily accepted.

I HAVE READ THE FOREGOING RELEASE AND FULLY UNDERSTAND IT.

IN WITNESS WHEREOF, I have hereunder set my hand this \_\_\_\_ day of

\_\_\_\_\_.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Witness

## **Sample Handout for Residents**

**Phone**

**Fax**

**Website**

**Address**

**City, State ZIP**

### **Substantial Improvement /Substantial Damage NFIP Requirements**

#### **Improvement and Repair of Property in the Floodplain**

(Insert community name) is a participating community in the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency. In exchange for making flood insurance available to citizens of the county, FEMA requires the community to adopt and enforce floodplain management regulations governing new construction and substantial improvements in mapped floodplains.

If you are rebuilding after a storm, renovating, remodeling, or adding an addition to your home or business, here is information you need to know concerning substantial improvement and substantial damage.

## Making SI/SD Determinations

Once the cost of the work and the market value of the structure have been determined, the (Community Name) will make a final determination of SI/SD. The work is SI/SD if the ratio of the cost of work to the market value equals or exceeds 50%:

$$(\text{Cost of Work} / \text{Market Value of Building}) \geq 50\%$$

If the county 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.

The purpose of the Substantial Improvement (SI) and Substantial Damage (SD) requirements is to protect the property owner's investment and safety, and, over time, to reduce the total number of buildings that are exposed to flood damage, thus reducing the burden on taxpayers through payment of disaster assistance. The SI/SD requirements are triggered when the local official determines that the cost of repairing or improving a building in a Special Flood Hazard Area (SFHA) equals or exceeds 50% of the building's market value (excluding land value).

**Substantial Damage (SD)** means damage of any origin sustained by a structure whereby the cost of restoring the structure to pre-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred. *Work on structures that are determined to be substantially damaged is considered a substantial improvement, regardless of the actual work performed. The cost of the repairs must include all costs necessary to fully repair the structure to its before-damage condition.*

**Substantial Improvement (SI)** means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before "start of construction" of the improvement. This term includes structures, which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

### (Insert Community Name)'s Responsibility

Communities that participated in the NFIP must determine whether proposed work qualifies as a substantial improvement or repair of substantial damage. If work on buildings constitutes SI/SD, then structures must be brought into compliance with NFIP requirements for "new construction", including the requirement that the lowest floor be elevated one (1) foot above the base flood elevation (BFE). There are four (4) major actions (Insert Community Name) performs in administering the SI/SD requirements:

- Determine costs,
- Determine market values,
- Make SI/SD determinations, and
- Require owners to obtain permits to bring substantially improved or substantially damaged buildings into compliance with the floodplain management requirements.

### Determining Costs

The term "costs of improvements" includes the complete costs associated with all of the types of work performed. The term "costs of repair" includes the costs of all work necessary to restore a damaged building to its pre-damaged condition. Both terms include the costs of all materials, labor, and other items necessary to perform the proposed work.

**Costs That Must Be Included in SI/SD Determinations.** 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 and owner or volunteered labor
- Site preparation related to the improvement or repair (e.g. foundation excavation or filling in basements)
- Demolition and construction debris disposal
- 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 current 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
  - Monolithic or other types of concrete slabs
  - Bearing walls, tie beams, trusses
  - Joists, beams, subflooring, framing, ceilings
  - Interior non-bearing walls
  - Exterior finishes
  - Windows and exterior doors
  - Roofing, gutters, and downspouts
  - Hardware
  - Attached decks and porches
- Interior finish elements, including:
  - Floor finishes
  - Bathroom tiling and fixtures
  - Built-in cabinets
  - 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

**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



- 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
- 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
- Costs required for the minimum necessary work to correct existing violations of health, safety, and sanitary codes
- Plug-in appliances such as washing machines, dryers, and stoves

**Sources of Cost Information.** The cost of improvements and the costs of repairs 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 owners may submit cost estimates that they prepare themselves. Owners will need to provide as much supporting documentation as possible, such as pricing information from lumber companies and hardware stores. The estimate must include the value of labor, including the value of the owner's labor.

**Donated/Discounted Materials.** 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. The applicant should provide cost estimates of the value of donated/discounted materials based on actual or estimated costs.

**Owner/Volunteer Labor.** The normal "market" value or "going rate" for labor must be included in the estimate of the cost of improvements and the costs to repair. 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.

### **Determining Market Value**

Generally, market value can be explained as the price a willing seller and buyer agree upon. The market value of a building reflects its original quality, subsequent improvements, physical age of building components, and current condition. For purposes of determining SI/SD, market value pertains only to the structure in question; the value of the land, landscaping, detached accessory buildings, etc., must be subtracted from the equation.

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."

Acceptable estimates of market value can be obtained from these sources:

- Appraised value developed for property tax assessment purposes.
- Detailed estimates of the structure's actual cash value, including depreciation.
- An independent appraisal by a licensed professional appraiser.

The appraised value will customarily be used by the community unless the owner chooses to determine market value by a professional appraiser at the owner's expense. Whatever method is used, the closer the estimate falls relative to the 50% threshold, the more precise the market value figure needs to be. In such circumstances, the community may require the owner to submit an appraisal from an independent professional appraiser.

If you have any questions about these requirements, contact **Community Official** at (000)-000-0000 or **EMAIL**.