

Substantial Damage Estimates and RAFT IAFSM 2024 - Peoria, IL March 12, 2024



Office of Water Resources
Resource Management – Statewide Programs



Floodplain Management Committee

Rapid Assistance Flood Team (RAFT)

Dawn Cosentino, P.E., CFM
Illinois State Water Survey
IAFSM Floodplain Management Committee Chair
RAFT Contact
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Does Illinois flood?



**Disasters
1993-2014**



As of 2014,
there has
been a
federally
declared
flood disaster
in every
county in
Illinois.

What is the purpose of RAFT?

- Assist communities in completing their post flood response quickly and accurately
- Capture highwater marks and determine damages before clean up and repairs begin
- Tag properties and provide permitting information to community
- Provide technical support
- Provide emotional support to community officials facing enforcement
- Provide experience to more CFMs in our state to improve post flood damage estimates and substantial damage enforcement



Who can be a **Rapid Assistance Flood Team** member?

- Members of the Illinois Association for Floodplain and Stormwater Management (IAFSM).
- Must be a Certified Floodplain Manager.
- Professionals from local, state, federal agencies and private sector consultants.
- Professionals trained in post-flood responsibilities.
- Volunteers who have agreed to assist communities in times of need.

Facing assessments of hundreds of flooded homes?

Community officials can take advantage of the expertise of IAFSM members!

- ▶ Over 800 IAFSM members
- ▶ Nearly 600 CFMs in Illinois
- ▶ Volunteers with flood damage inspection and estimating experience



RAFT allows local officials the time to focus on structures with 40-60% damages.



NFIP Post Flood Responsibilities

- Get out and map highwater marks and structures touched by floodwaters
- Choose a method of estimating damages, consider FEMA's Substantial Damage Estimator tool if many buildings are damaged
- Move fast – Inspect, tag, photograph and document flood height and damages of all flooded structures
- Complete damage assessments. When a structure is at or near the 50% threshold, a room-by-room inspection and estimate of damages should be completed.
- Send letters out to all property owners.
- Consider recording letters for buildings with 40% or more damage
- Require compliance and building permits for all repairs and mitigation if necessary
- Post information to the public on permit requirements
- Provide guidance to property owners

How Does a Community Request RAFT Help?

Illinois Association for Floodplain and Stormwater Management
35W749 Bluff Drive
St. Charles, IL 60175

RE: Request for IAFSM RAFT Assistance

To Whom It May Concern:

On (insert date), the (insert community) suffered severe flooding. This letter serves to request the assistance of the IAFSM RAFT to assist local officials with damage assessment and other disaster response functions.

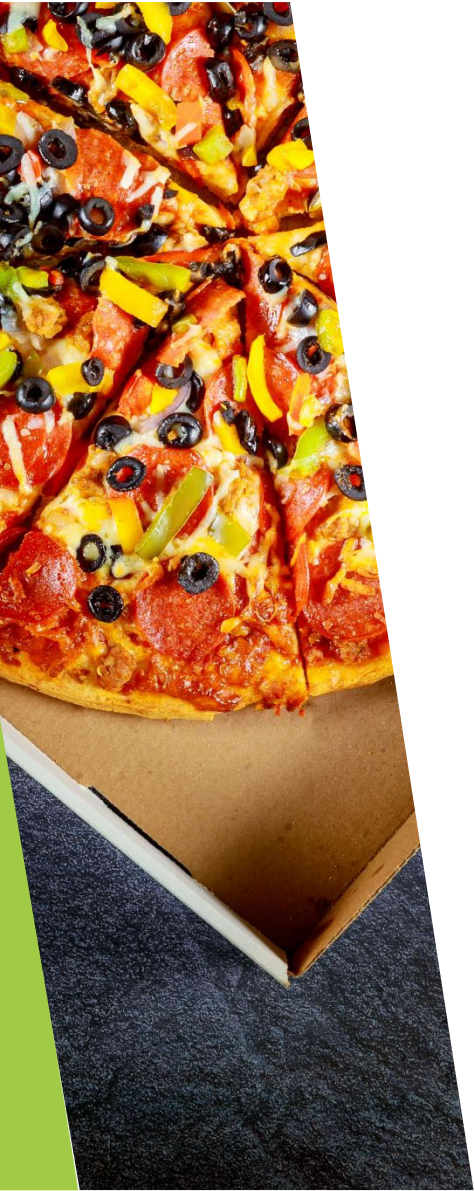
In making this request, the (insert community) agrees to indemnify and hold harmless the IAFSM, its agents and assigns, and any persons who participate in Rapid Assistance Flood Team activities for any actions or inactions during the course of the disaster response.

Furthermore, the (insert community) agrees and declares that any actions taken by any of the above-referenced persons in the course of providing assistance are to be considered duly authorized actions of the (insert community).

The (insert community) has designated the following staff member as primary point of contact for the IAFSM RAFT Volunteer(s):

John Flood
Floodplain Manager
(XXX) XXX-XXXX
fpm@XXX.org

- A formal request letter must be sent to the IAFSM Floodplain Management Chairman
- This letter also serves as a release of liability
- Initial request is often prompted by outreach from the state NFIP coordinator



Will Requesting RAFT cost a Community Anything?

- RAFT members volunteer their time
- Per diem and travel are reimbursed to them by IAFSM (using current State of Illinois travel rates)
- Most communities provide coffee, water bottles and a simple pizza lunch
- If overnight lodging is required, it must be provided by the host community.






RAFT Volunteer Commitment

- Volunteers commit for one or possibly two days depending on the number of structures affected.
- Assessments are typically completed during the work week. If overnight lodging is required, it must be provided by the host community.
- Volunteers can be reimbursed for travel or per diem by IAFSM if requested.





Role of IAFSM – Floodplain Committee Chair

- Acts as overall coordinator of RAFT program
 - Coordinates finding volunteers for each request
 - Ensures RAFT member liability waiver forms are updated, signed annually and maintained on file
 - Coordinates logistics for deployment to host community
 - Provides damage assessment packet and volunteer packet
 - Provides annual training to ensure RAFT volunteers use consistent and industry accepted damage assessment methods developed by IAFSM to ensure equitability.
- 


RAFT Requirements for Volunteers



- Attend training every other year to be prepared for damage assessment response
- Maintain IAFSM membership and Certified Floodplain Managers (CFMs) license
- Provide equipment (digital camera, clip board, etc.) and clothing (boots, mask, etc.) necessary to conduct damage assessments
- Provide digital photos of damage assessments and digital files to the host community.
- Provide a vehicle to get to the host community and conduct damage assessments
- Bring a personal photo identification badge to wear during inspections
- Provide a signed liability waiver form annually



RAFT Expectations for Host Community

- Provide official ID tag or letter from community
 - Provide a local host to coordinate the RAFT volunteers
 - Provide a local contact or cell phone number for RAFT volunteers in case of emergency (police or fire)
 - Provide a morning meeting location and afternoon wrap-up location
 - Provide RAFT volunteer with damage assessment worksheets and map with assigned addresses to inspect
 - Maintain records of damage assessments
 - Ensure follow up on damage assessments and compliance with floodplain regulations
 - Reimburse IAFSM for the travel and per diem expenses paid to RAFT volunteers if the host community has the financial means or if disaster assistance funding is obtained.
 - Provide a pizza lunch!
- 

RAFT Volunteer Agreement

Name: _____

Firm/Community/County: _____

Address: _____

Phone: (____) _____ FAX: (____) _____

E-Mail Address: _____

Geographic Availability: 1) Chicago Metro (____) 2) Northeastern IL (____)
3) Northern IL (____) 5) Central IL (____)
3) Metro East (____) 6) Southern IL (____)

I am a Certified Floodplain Manager and my No. is _____

I have performed _____ number of damage assessments using FEMA's Substantial Damage Estimator Tool

I have _____ years of experience with conducting damage assessments for _____

I have participated in the annual IAFSM R.A.F.T. annual training in 20_____

EXPERTISE TO BE PROVIDED RELATING TO DISASTER RESPONSES:
(damage assessment & estimating, expedient design, building code inspections, etc.)

Emergency Contact:

Name: _____ Phone Bus.: (____) _____

Email: _____ Phone Cell: (____) _____

Signed: _____ Date: _____



RAFT Volunteer Annual Waiver Form

I _____ have volunteered as a member of the Illinois Association for Floodplain and Stormwater Management (IAFSM) Rapid Assistance Flood Team (RAFT).

As a volunteer, I agree to indemnify and hold harmless the IAFSM, its agents and assigns, and any persons who participate in RAFT activities for any actions or inactions during the course of the disaster response.

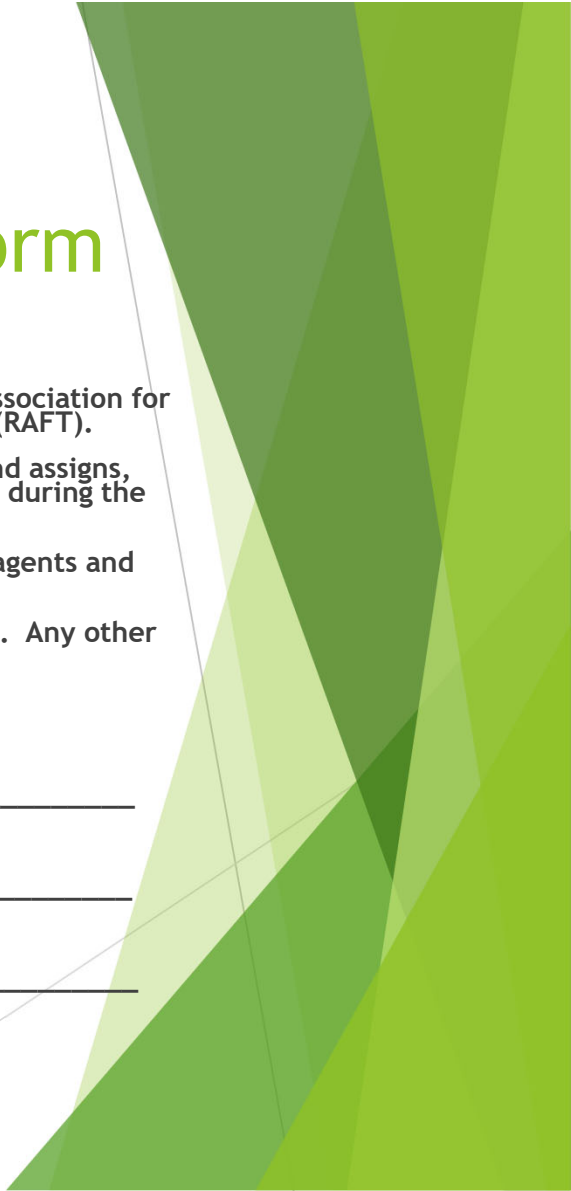
Furthermore, I agree to indemnify and hold harmless the host community, its agents and assigns for any actions or inactions during the course of the disaster response.

I understand that IAFSM will not reimburse my travel cost and a daily per diem. Any other expenses are the responsibility of the volunteer or the volunteer's employer.

Signature of RAFT Volunteer: _____

Community/Firm Name: _____

Signature of Volunteer's Community/Firm CEO: _____





RAFT Volunteers - Equipment Required

- RAFT Guidance Booklet with sample documents
- Bug repellent/sunscreen
- Clipboard
- Pen/Pencil
- Tape Measure (100 Foot)
- Local identification badge
- Flashlight
- Boots
- Rubber Gloves
- Face mask (N95)
- Digital Camera
- Cell phone
- ID and health insurance card



Why Should a Community Ask for RAFT?

- Brings in professionals with substantial damage assessment knowledge
- Quick inspections to find your substantially damaged structures before repairs begin
- Outreach with permitting requirements
- Weeks of work completed in a day or two
- Helps you remain NFIP compliant
- Gets your community and residents on the fast lane to recovery
- Cost you NOTHING! (except for a few pizzas)
- Opportunity to make a few more friends! Especially needed over the weeks ahead.



Basic NFIP Requirements

- Ensure that all proposed development is reasonably safe from flooding.
- Ensure that the lowest floor of any structure in the SHA is elevated to or above the base flood elevation.
- Ensure that work done in the floodway does not increase the Base Flood Elevation.
- All work done in the floodplain needs a permit before proceeding
- If a building in a floodplain is determined to be substantially improved or substantially damaged it must be brought into compliance with local floodplain management regulations.

Substantial Damage

Damage of **any origin** sustained by a building in a floodplain whereby the damage (*or cumulative percentage of damage during 10-year period*) equals or exceeds 50 percent of the market value of the building before the damage occurred, regardless of actual repair work performed.

The market value of volunteer labor and materials must be included in this determination.

Calculating SD

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

The *Cost to Repair* must include all costs necessary to fully repair the structure to its pre damage condition. Notice that the formula uses “**cost to repair,**” not “cost of repairs.”

Examples: $\frac{\$30,000}{\$100,000} = 0.3 \times 100 = 30\%$

$$\frac{\$75,000}{\$100,000} = 0.75 \times 100 = 75\%$$

Monitor damaged structures for added improvements which may lead them to a Substantial Improvement.

Calculating Cumulative Substantial Improvement and Substantial Damage Issues

If a Substantial Improvement is permitted just below the 50% threshold and the building floods or needs a new roof within the cumulative period, the requirement to elevate, relocate, demolish, or floodproof (non-residential) is triggered

2010 kitchen remodel- 30%
+ 2023 flood damage - 30%
60% mitigation required

Cumulative rules that extend beyond 10-years of accrued time will not provide access to Increased Cost of Compliance funds under a NFIP policy.

2008 flood damage - 30%
+ 2023 flood damage - 30%
60% mitigation required

(15-year spread, not eligible for ICC claim under NFIP policy for up to \$30,000 for mitigation)

Proposed Substantial Improvement vs. Substantial Damage Determination

- Substantial Improvement is based on a voluntary request to improve a building where the cost equals or exceeds the 50% threshold.
- An improvement project can be downscaled to go below 50%
- Substantial Damage means the house has been damaged and REGARDLESS of repairs the building must be brought into compliance.
- A Substantial Damage determination requires mitigation.

Resources and Guidance

Flood Smart

- <https://www.floodsmart.gov>

FEMA Map Service Center and National Flood Hazard Layer

- MSC - <https://msc.fema.gov>
- NFHL - <https://msc.fema.gov/nfhl>

FEMA Mapping and Insurance eXchange (FMIX)

- Customer Care Center -- 877-336-2627
- https://floodmaps.fema.gov/fhm/fmx_main.html

Substantial Improvement/Substantial Damage Desk Reference

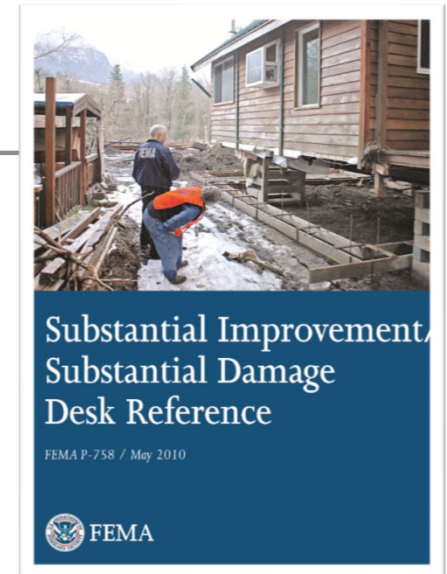
- https://www.fema.gov/media-library-data/20130726-1734-25045-2915/p_758_complete_r3.pdf

Answers to Questions about Substantially Improved/Substantially Damaged

- [Answers to Questions About Substantially Improved/Substantially Damaged Buildings FEMA 213](#)

Answers to Questions about Increased Cost of Compliance

- [Increased Cost of Compliance Coverage | FEMA.gov](#)
- https://www.fema.gov/sites/default/files/2020-08/fema_increased-cost-of-compliance_fact-sheet.pdf



SD Tools and Online Training

Substantial Damage Estimator (SDE) Tool

- Software
 - https://www.fema.gov/sites/default/files/2020-07/SDE3_04062018.zip
- User Manual and Field Workbook:
 - https://www.fema.gov/sites/default/files/2020-07/sde_3.0_user_manual_field_workbook_0.pdf

FEMA's Emergency Management Institute (EMI) Independent Study Courses

- IS-284.A: Using the Substantial Damage Estimator 3.0 Tool
 - <https://training.fema.gov/is/courseoverview.aspx?code=IS-284.a>
- IS-285: Substantial Damage Estimation for Floodplain Administrators
 - <https://training.fema.gov/is/courseoverview.aspx?code=IS-285>

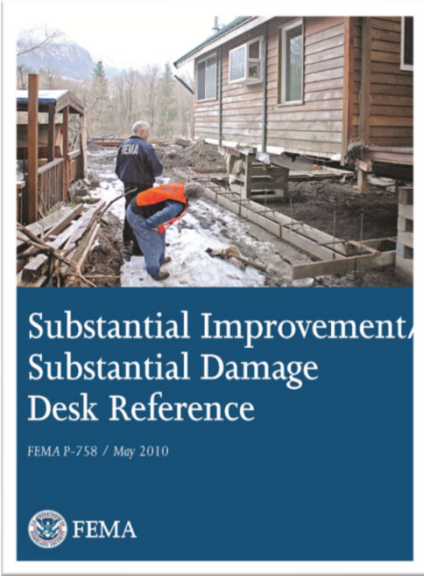
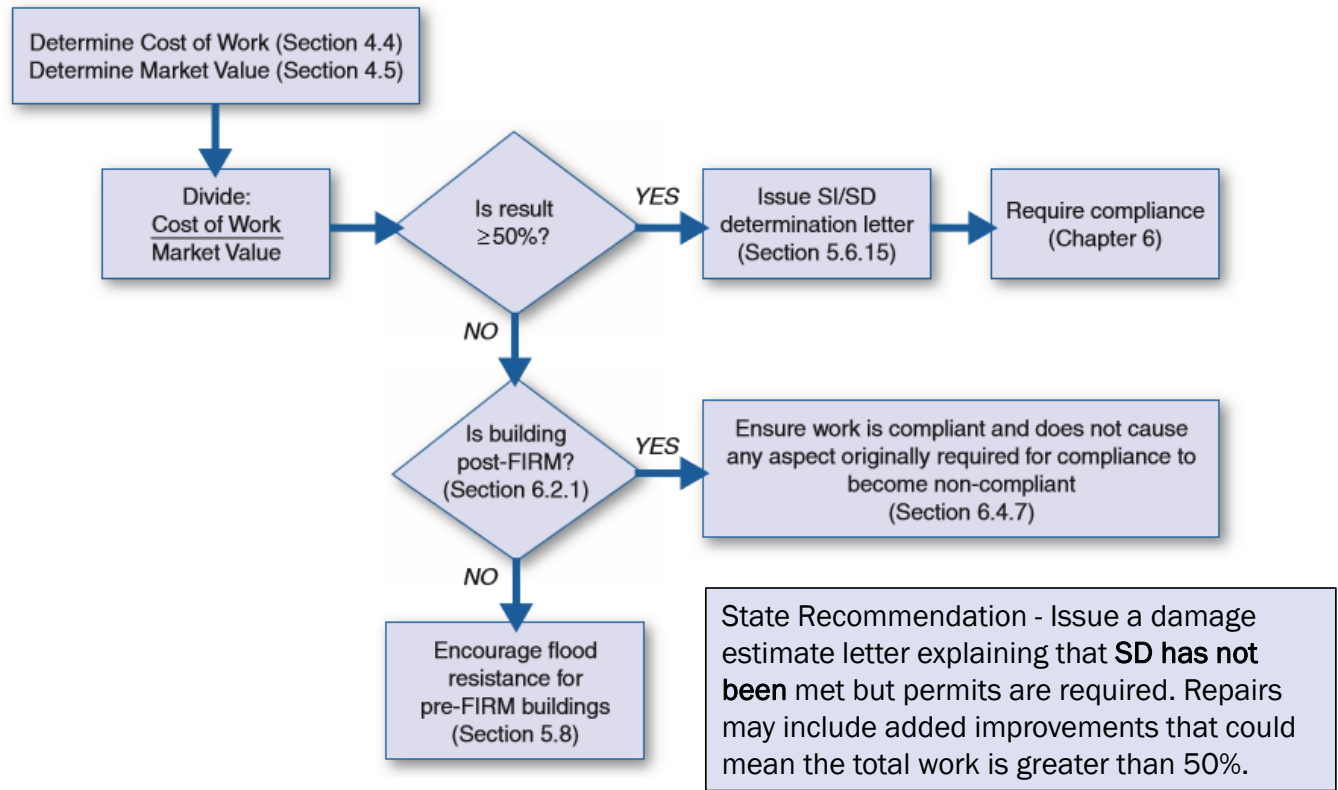


Substantial Damage Estimator (SDE) User Manual and Field Workbook

Using the SDE Tool to Perform Substantial Damage Determinations

FEMA P-784 / Tool Version 3.0 / August 2017





Substantial Damage Determination SDE 3.0 Flow Chart

SD Tools and Online Training (cont.)

FEMA YouTube SDE Training Modules (10 modules)

- https://www.youtube.com/watch?v=5WOCDF1Wods&list=PL720Kw_OojIKaUGLcpIGiC2Gw9-lutGHt

Example SD Plans

- Template for a Substantial Damage Management Plan
https://crsresources.org/files/500/sde_credit_template.docx



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FEMA P-784 / Tool Version 3.0 / August 2017



NFIP Technical Bulletins

- TB-1 - [Requirements for Flood Openings in Foundation Walls and Walls of Enclosures](#)
- TB-2 - [Flood Damage-Resistant Materials Requirements](#)
- TB-3 - [Requirements for the Design and Certification of Dry Floodproofed Non-Residential and Mixed-Use Buildings](#)
- TB-4 - [Elevator Installation for Buildings Located in Special Flood Hazard Areas](#)
- TB-5 - [Free of Obstruction Requirements For Buildings Located in Coastal High Hazard Areas](#)



Openings in Foundation Walls and Walls of Enclosures

Below Elevated Buildings in Special Flood Hazard Areas
in accordance with the National Flood Insurance Program

Technical Bulletin 1 / August 2008



FEMA

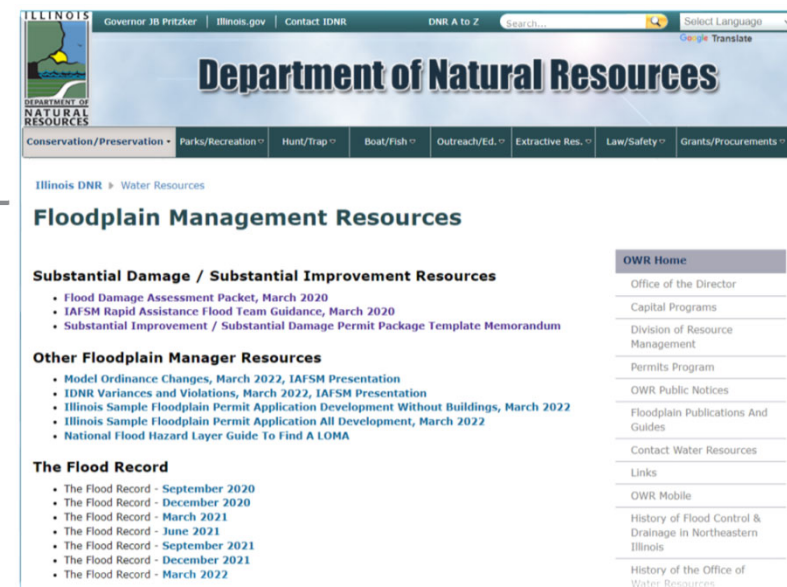
NFIP Technical Bulletins

- TB-6 - Requirements for Dry Floodproofed Below-Grade Parking Areas Under Non-Residential and Mixed-Use Buildings Located in Special Flood Hazard Areas
- TB-7 - Wet Floodproofing Requirements for Structures Located in Special Flood Hazard Areas
- TB-10 [Reasonable Safe From from Flooding Requirement for Building on Filled Land](#) ~~Ensuring That Structures Built on Fill In or Near Special Flood Hazard Areas Are Reasonably Safe From Flooding~~
- TB-11 - [Crawlspace Construction for Buildings Located in Special Flood Hazard Areas](#)



State Specific Resources

- [Floodplain Management Resources - Water Resources \(illinois.gov\)](https://www.illinois.gov)
- [State of Illinois Flood Damage Assessment Packet \(illinois.gov\)](https://www.illinois.gov)
- [SI/SD Permit Packet Template \(illinois.gov\)](https://www.illinois.gov)
- [Rapid Flood Assessment Team Guidance \(illinois.gov\)](https://www.illinois.gov)
- [Illinois Association for Floodplain and Stormwater Management \(illinoisfloods.org\)](https://www.illinoisfloods.org)
- [Are You Flood Ready \(prepare.illinoisfloods.org\)](https://prepare.illinoisfloods.org)



The screenshot shows the Illinois Department of Natural Resources website. The header includes the state logo, Governor JB Pritzker's name, and navigation links for Illinois.gov and Contact IDNR. A search bar and a language selection dropdown are also present. The main navigation menu includes Conservation/Preservation, Parks/Recreation, Hunt/Trap, Boat/Fish, Outreach/Ed., Extractive Res., Law/Safety, and Grants/Procurements. The page content is titled "Floodplain Management Resources" and is part of the "Water Resources" section. It lists "Substantial Damage / Substantial Improvement Resources" with links to Flood Damage Assessment Packet (March 2020), IAFSM Rapid Assistance Flood Team Guidance (March 2020), and Substantial Improvement / Substantial Damage Permit Package Template Memorandum. It also lists "Other Floodplain Manager Resources" including Model Ordinance Changes (March 2022), IDNR Variances and Violations (March 2022), Illinois Sample Floodplain Permit Application Development Without Buildings (March 2022), Illinois Sample Floodplain Permit Application All Development (March 2022), and National Flood Hazard Layer Guide To Find A LOMA. A "The Flood Record" section lists various flood records from September 2020 to March 2022. A right-hand sidebar titled "OWR Home" contains links to the Office of the Director, Capital Programs, Division of Resource Management, Permits Program, OWR Public Notices, Floodplain Publications And Guides, Contact Water Resources, Links, OWR Mobile, History of Flood Control & Drainage in Northeastern Illinois, and History of the Office of Water Resources.



Costs That Must be Included in SD determinations

- The term includes the cost of all materials, labor, and other items necessary to perform the proposed work.
- Costs that must be included in SD determinations but not limited to:
 - Structural elements and exterior finishes
 - Interior finish elements
 - Utility and service equipment
 - Contractor's overhead and profit
 - Construction management and supervision
 - Labor and other costs associated with demolishing, moving, or altering building components to accommodate improvements, additions, and making repairs
 - Materials and labor, including the estimated value of donated or discounted materials and owner or volunteer labor

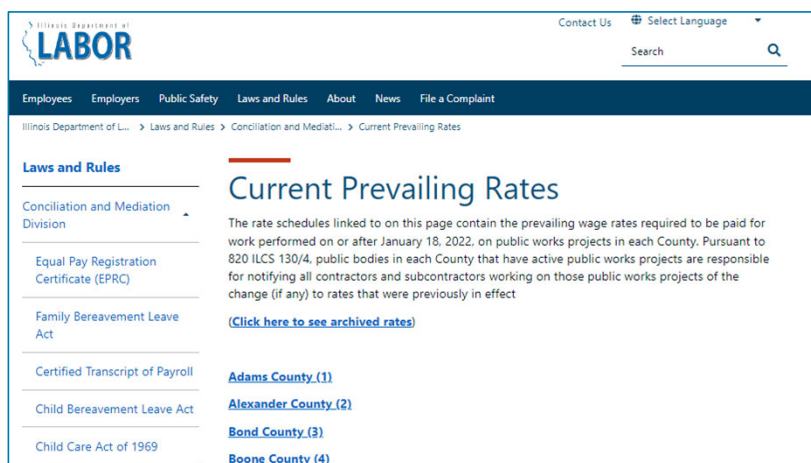


Substantial Improvement/
Substantial Damage
Desk Reference

FEMA P-758 / May 2010

Calculating Wages and Profit

- The Desk Reference has limited guidance.
- Wages (pg. 4-8) are to be the “going rate”, says to use minimum-hour wage scales for the skill and type of work being done.



The screenshot shows the Illinois Department of Labor website. The header includes the IL Department of Labor logo, a search bar, and navigation links for Contact Us, Select Language, and a search icon. The main navigation menu lists Employees, Employers, Public Safety, Laws and Rules, About, News, and File a Complaint. The breadcrumb trail indicates the current page is 'Current Prevailing Rates' under 'Laws and Rules' > 'Conciliation and Mediation...'. The page title is 'Current Prevailing Rates'. The main content area explains that the rate schedules linked on the page contain the prevailing wage rates required to be paid for work performed on or after January 18, 2022, on public works projects in each County. It also states that pursuant to 820 ILCS 130/4, public bodies in each County that have active public works projects are responsible for notifying all contractors and subcontractors working on those public works projects of the change (if any) to rates that were previously in effect. A link is provided to see archived rates. Below this, there are links for Adams County (1), Alexander County (2), Bond County (3), and Boone County (4).

- Many property owners get a contractors estimate just to estimate the work. If they provide an insurance adjuster’s estimate you will see their wages for the various construction skills.
- IL Department of Labor published prevailing wage rate tables for each county: <https://labor.illinois.gov/laws-rules/conmed/current-prevailing-rates.html>

State of Illinois Flood Damage Assessment Packet



February 2024

Includes Information On:

- Steps to Take Following a Flood
- Substantial Damage Determinations – “The 50% Rule”
- Damage Inspection Worksheets
- Sample Post Flood Door Hanger
- FEMA Substantial Damage Estimator (SDE 3.0)
- Illinois Damage Assessment Cheat Sheet
- Sample Handout for Residents
- Sample Press Release
- Sample Substantial Damage Letter
- Sample Flood Damage Letter
- Sample Building Notice
- Temporary Certificate of Occupancy
- Sample Right of Entry Permission Form
- Help with Damage Assessments
- State Floodway Permit– Regulatory Issues
- Mitigation Grant Information
- Increased Cost of Compliance Funds for Substantially Damaged Buildings



Illinois Emergency Management Agency
and Office of Homeland Security



Substantial Damage Estimator (SDE) User Manual and Field Workbook

Using the SDE Tool to Perform
Substantial Damage Determinations

FEMA P-784 / Tool Version 3.0 / August 2017



FEMA



The SDE is a tool to help local officials
administer the Substantial Damage
requirements of their floodplain
management ordinances in keeping with
the minimum requirements of the NFIP.



Residential Damage Inspection Worksheet

Community Name _____ Inspector(s) _____

Inspection # _____ Photo # _____ Date _____

PROPERTY LOCATION and Owner's Mailing Address (if Different from property address)

Owner Name _____ Owner Cell _____

Address _____ Mailing Address _____

City, State, Zip _____ Mailing C/St/Zip _____

County _____ PIN _____

STRUCTURE ATTRIBUTES

Residence Type: Manufactured House Foundation: Continuous Wall w/Slab

Basement

Crawlspace

Piles

Slab-on-Grade

Piers & Posts

Superstructure: Stud-Framed

Common Brick

ICF

Masonry

Roof Covering: Shingles – Asphalt, Wood

Clay Tile

Standing Seam (Metal)

Slate

Exterior Finish: Siding or Stucco

Brick Veneer

Exterior Insulation Finishing Systems (EIFS)

None – common brick, structural

HVAC System: Heating and/or Cooling

None

Story: One Story

Two or more Stories

Split Level

Quality: Low

Budget

Average

Good

Excellent

Year of Construction: _____

Date Damage Occurred: ____/____/____

Cause of Damage: Fire

Flood

Flood and Wind

Seismic

Wind

Other

Duration of Flood: _____ Hours

Days

Depth of Flood Above Ground: _____

Depth of Flood Above 1st Floor: _____

Depth of Flooding in Crawlspace: _____

Depth of Flooding in Basement: _____

Page 1 of 2

TOTAL SQUARE FOOTAGE: (Source: Field _____ Assessor _____)

Number of Stories: _____ Square Footage _____

Basement _____ Crawlspace _____

Garage-Attached _____ Garage-Detached _____

Other Notes: _____

OTHER COST ADJUSTMENTS: Describe and provide quantity or square footage

Heating/Cooling: _____

Appliances: _____

Flooring: _____

Garage: _____

Porch/Breezeway: _____

Fireplace: _____

Other: _____

General Condition (circle one): Needs extensive repairs Minor repairs Average

Above average excellent Excellent

Other _____

ELEMENT PERCENTAGES (Refer to Damage Assessment Cheat Sheet for guidance)

Foundation _____% Floor Finish _____%

Superstructure _____% Plumbing _____%

Roof Covering _____% Electrical _____%

Exterior Finish _____% Appliances _____%

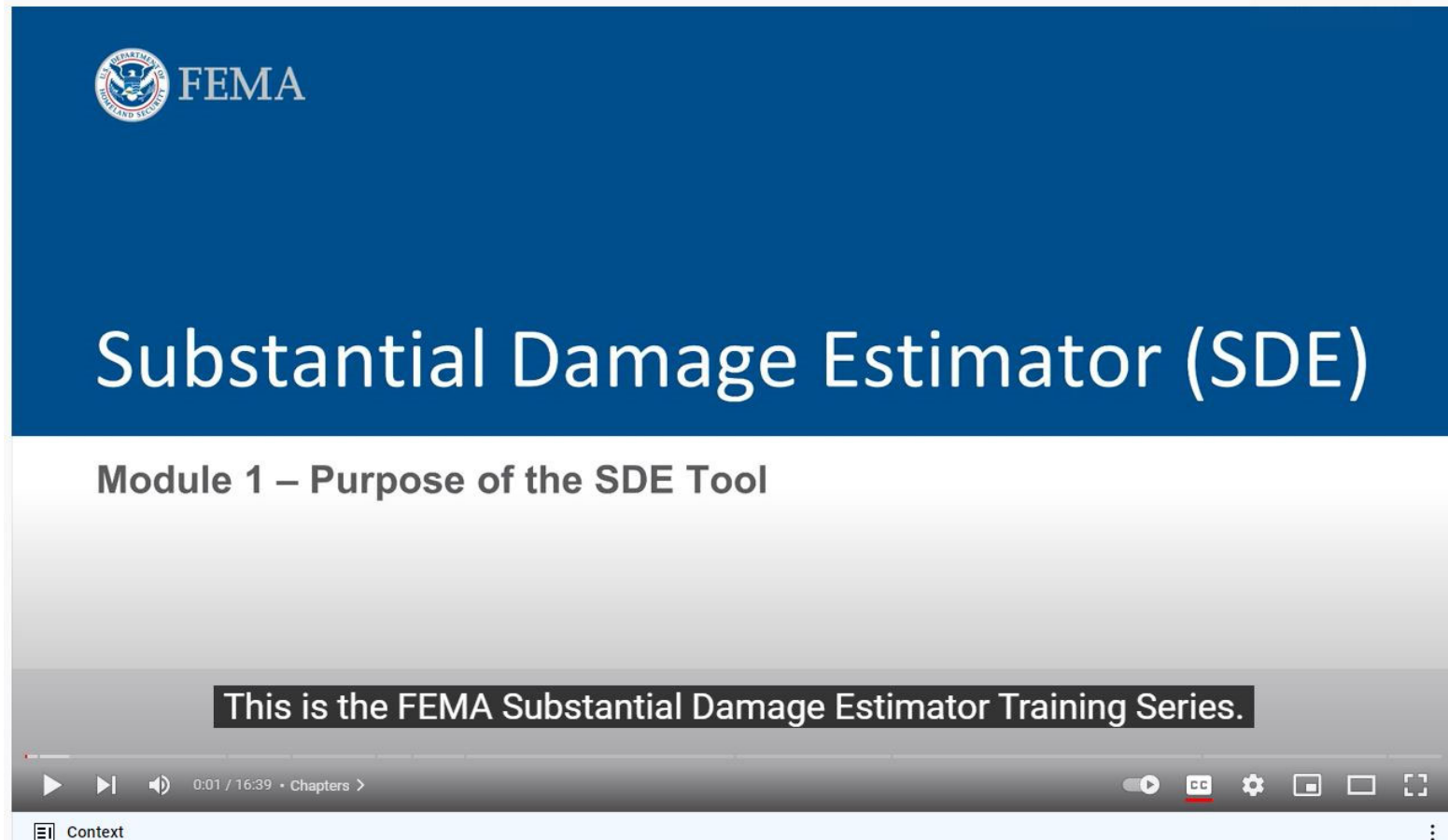
Doors and Windows _____% Interior Finish _____%

Cabinets & Countertops _____% HVAC _____%


MISC NOTES:

Page 2 of 2

SDE Tool – YouTube Training Series



The image shows a YouTube video player interface. At the top left, there is the FEMA logo, which consists of a circular seal with an eagle and the text 'U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT' around it, followed by the letters 'FEMA' in a bold, sans-serif font. Below the logo, the title 'Substantial Damage Estimator (SDE)' is displayed in a large, white, sans-serif font against a dark blue background. Underneath the title, the subtitle 'Module 1 – Purpose of the SDE Tool' is shown in a smaller, black, sans-serif font. A black text box with white text reads 'This is the FEMA Substantial Damage Estimator Training Series.' Below this, the video player controls are visible, including a play button, a progress bar showing '0:01 / 16:39', and icons for chapters, closed captions, settings, and full screen. At the bottom left, there is a 'Context' button with a list icon.

 FEMA

Substantial Damage Estimator (SDE)

Module 1 – Purpose of the SDE Tool

This is the FEMA Substantial Damage Estimator Training Series.

0:01 / 16:39 • Chapters >

Context

Residential

SDE DAMAGE INSPECTION WORKSHEET

Single-Family, Town or Row House (Site Built Residences), or Manufactured House

Address: _____

SDE ADDRESS Tab

Subdivision / Community Information

Subdivision: _____ Parcel Number: _____

Lot Number: _____ Elevation of Lowest Floor: _____ Datum: _____

Community Information

NFIP Community ID: _____ NFIP Community Name: _____

Latitude: _____ Longitude: _____

Building Address

Owner First Name: _____ Owner Last Name: _____

Street Number: _____ Street Name: _____ Street Suffix: _____

City: _____ State: _____

County/Parish: _____ Zip: _____

Phone: _____ Cell Phone: _____

Mailing Address *Check here if same as building address:* _____

First Name: _____

Last Name: _____

Street Number: _____ Street Name: _____ Street Suffix: _____

City: _____ State: _____

County/Parish: _____ Zip: _____

Phone: _____ Cell Phone: _____

The screenshot displays the Lake County, Illinois Maps Online interface. The main map shows an aerial view of a residential area with a red outline highlighting a specific parcel. A popup window titled "Tax Parcel Information: 1109402003" is open, displaying the following details:

10 Digit Parcel Number	1109402003
Township	Libertyville
Municipality	UNINCORPORATED
Unincorporated Zoning	R-3
Property Address	16305 W BUCKLEY RD
Post Office or City	LIBERTYVILLE IL 60048
Taxpayer Name	FREDERICK J & LILY SOBOL
Tax Description Line 1	NORTH LIBERTYVILLE ESTS. UNIT 1 LOT 7
Tax Description Line 2	

The interface also includes a search bar at the top with the text "Find pin, address or place", a "Layer List" on the right side with various options like "PIN Labels", "Taxpayer Name Labels", "Address Labels", etc., and a "Zoom to" button at the bottom of the popup window.

Residential

SDE DAMAGE INSPECTION WORKSHEET

Single-Family, Town or Row House (Site Built Residences), or Manufactured House

Address: _____

SDE ADDRESS Tab

Subdivision / Community Information

Subdivision: _____ Parcel Number: _____

Lot Number: _____ Elevation of Lowest Floor: _____ Datum: _____

Community Information

NFIP Community ID: _____ NFIP Community Name: _____

Latitude: _____ Longitude: _____

Building Address

Owner First Name: _____ Owner Last Name: _____

Street Number: _____ Street Name: _____ Street Suffix: _____

City: _____ State: _____

County/Parish: _____ Zip: _____

Phone: _____ Cell Phone: _____

Mailing Address *Check here if same as building address:* _____

First Name: _____

Last Name: _____

Street Number: _____ Street Name: _____ Street Suffix: _____

City: _____ State: _____

County/Parish: _____ Zip: _____

Phone: _____ Cell Phone: _____

Lake County, Illinois Maps Online

Visit our home page

Find pin, address or place

W Buckley Rd

137

137

6696th East

FLOOD

(1 of 2)

Tax Description Line 2

Tax Description Line 3

Additional Information

[View Tax Map WITH DIMENSIONS](#)

[Property Records Search](#)

[Tax Bill Information](#)

[Historic Parcel Viewer](#)

[Street View / Oblique View](#)

[Bing Bird's Eye](#)

[ISGS Wells Sites](#)

[Recorders Web](#)

Lake County Staff Links

[Zoom to](#)

Layer List

- PIN Labels
- Taxpayer Name Labels
- Address Labels
- Street Number Labels
- Sale Amount Labels
- Sale Date Labels
- Sale Date and Amount Labels
- Acreage Labels
- Land Area Sq Ft Labels
- Living Area Sq Ft Labels
- Current Assessed Value Labels
- Tax Parcel Lines
- Tax Parcel Information
- Assessment Neighborhoods
- Parcels - Historic
- Planning
- Political Boundaries

Lake County, Illinois GIS/Mapp

SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Structure Attributes / Information

Residence Type: Single Family Town or Row House Manufactured House
Foundation: Continuous Wall w/Slab (Standard) Basement Crawlspace
 Piles Slab-on-Grade Piers and Posts
Superstructure: Stud-Framed (Standard) Common Brick ICF Masonry
Roof Covering: Shingles – Asphalt, Wood (Standard) Clay Tile Standing Seam (Metal)
 Slate
Exterior Finish: Siding or Stucco (Standard) Brick Veneer EIFS
 None – common brick, structural
HVAC System: Heating and/or Cooling None
Story: One Story (Standard) Two or More Stories

Structure Information

Year of Construction: _____
Quality of Initial Construction: Low Budget Average Good Excellent
Residence Information (if needed): _____

Inspector / Damage Information

Inspector's Name: _____ Inspector's Phone: _____
Date of Inspection (mm/dd/yyyy): _____ Date Damage Occurred (mm/dd/yyyy): _____
Cause of Damage: Fire Flood Flood and Wind Seismic Wind Other
Cause of Damage (if "Other" is selected): _____

Some Assessor websites or County GIS will have easily available structure data, year of construction and even photos. Ex. Below from Cook Co GIS and link to assessor.

The damage inspection can fill in the structure attribute, describe the quality of construction, and take photos. The assessor will need to give year constructed.

DESCRIPTION	One story residence,
RESIDENCE TYPE	One Story
USE	Single Family
APARTMENTS	0
EXTERIOR CONSTRUCTION	Frame/Masonry
FULL BATHS	1
HALF BATHS	0
BASEMENT ¹	Slab
ATTIC	Full
CENTRAL AIR	No
NUMBER OF FIREPLACES	0
GARAGE SIZE/TYPE ²	1 Car
AGE	69
BUILDING SQUARE FOOTAGE	972
ASSESSMENT PHASE	Assessor Valuation



SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Structure Attributes / Information

Residence Type: Single Family Town or Row House Manufactured House
Foundation: Continuous Wall w/Slab (Standard) Basement Crawlspace
 Piles Slab-on-Grade Piers and Posts
Superstructure: Stud-Framed (Standard) Common Brick ICF Masonry
Roof Covering: Shingles - Asphalt, Wood (Standard) Clay Tile Standing Seam (Metal)
 Slate
Exterior Finish: Siding or Stucco (Standard) Brick Veneer EIFS
 None - common brick, structural
HVAC System: Heating and/or Cooling None
Story: One Story (Standard) Two or More Stories

Structure Information

Year of Construction: _____
Quality of Initial Construction: Low Budget Average Good Excellent
Residence Information (if needed): _____

Inspector / Damage Information

Inspector's Name: _____ Inspector's Phone: _____
Date of Inspection (mm/dd/yyyy): _____ Date Damage Occurred (mm/dd/yyyy): _____
Cause of Damage: Fire Flood Flood and Wind Seismic Wind Other
Cause of Damage (if "Other" is selected): _____

St. Clair Co

BLDG #	1	
Style (Tb-02)	1.0	One Story
Quality (Yr-95)	D+10	D+10 Fair
Building Use	0040	Single Fami
Exterior Wall 1	F	Frame
Exterior Wall 2		
Foundation Adj	C	Crawl
Basement		
Combination		
Attic Area		
Heat/AC Adj	AC	Central Air
Comb Ht/AC Adj		
Fireplace	00	N/A
Extra Fireplace	00	N/A
Res Fixtures	0005	05 Fixtures
Garage	F	Garage Attd
Mobile Home	0000	N/A
Design Adj	00	N/A
Actual Year Blt	1959	
Effect Year Blt	1985	
Normal Depr Tbl	P	Res CDU - P
Functional Obs	000000	

SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Structure Attributes / Information

Residence Type: Single Family Town or Row House Manufactured House
Foundation: Continuous Wall w/Slab (Standard) Basement Crawlspace
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Structure Information

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Quality of Initial Construction: Low Budget Average Good Excellent
Residence Information (if needed): _____

Inspector / Damage Information

Inspector's Name: _____ Inspector's Phone: _____
Date of Inspection (mm/dd/yyyy): _____ Date Damage Occurred (mm/dd/yyyy): _____
Cause of Damage: Fire Flood Flood and Wind Seismic Wind Other
Cause of Damage (if "Other" is selected): _____

Lake Co

Physical Characteristics

Style: 65
Model: Two Story
Construction: Frame
Quality Grade: Avg+
Condition: AV
Brick: 182 SF / 0 Lin SF
Year Built / Effective: 1955 / 1992
Attic Fin Area / Misc Fin Area: 0 / 0
Basement Area / Finished Area: 0 / 0
Lower Level Area / Finished Area: 0 / 0
Bedrooms: 5
Full Baths / Half Baths / Total Fixtures: 4 / 1 / 15
Basement Features:
Central Air: Yes
Fireplaces:
Roof Cover: Comp sh to 235#
Garage Attached / Detached / Carport: 0 / 1 / 0
Garage Attached / Detached / Carport Area: 0 / 720 / 0
Decks / Patio: 0 / 0
Decks / Patio Area: 0 / 0
Porches Open / Enclosed: 1 / 0
Porches Open / Enclosed Area: 5 / 0
Pool (Size): 0
Gazebo (Size): 0
Other Exterior Features:
Other Structures:

Living Area

First Floor: 2,048
Second Floor: 1,526
Other Floor: 0
Total Above Ground Living Area (AGLA): 3,574

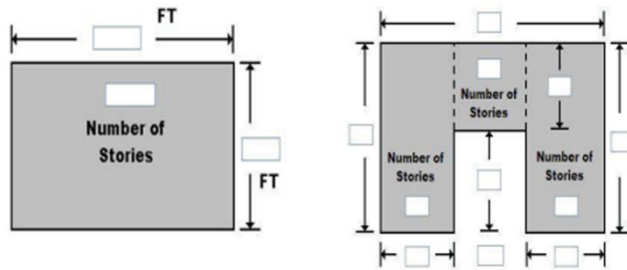
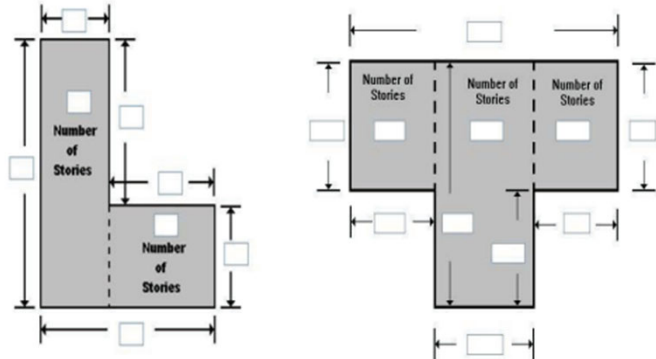
[Lake County Township Assessors Parcel Search \(imslake.org\)](https://www.imslake.org/SD/Lake/AssessorDB/Search(imslake.org))

<https://www.imslake.org/SD/Lake/AssessorDB/PropertyDetail.aspx>



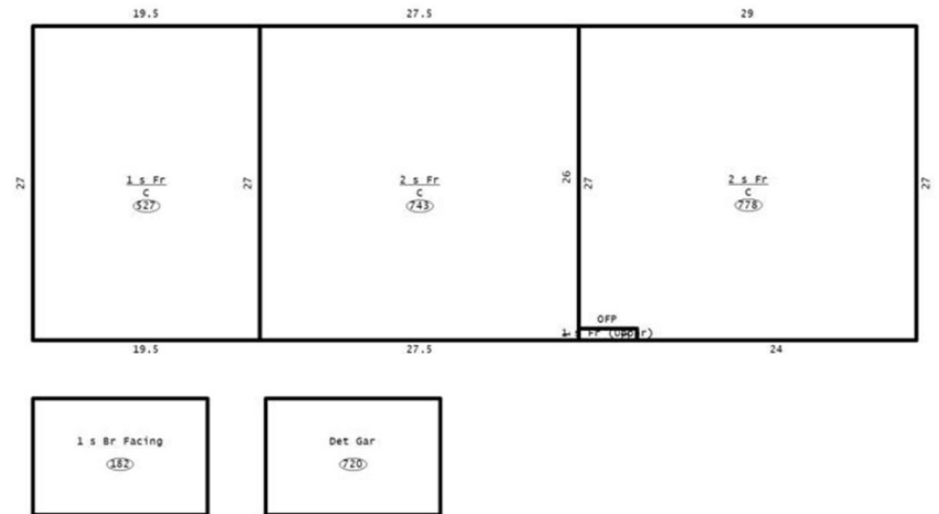
COST Tab

Select appropriate diagram of structure footprint and enter structure dimensions and the number of stories:



RAFT inspectors will take measurements unless you know all the data is available through assessor. Photos will show any discrepancy.

Appeals Comparables (iasWorld)	Economic Depreciation %:								
Documents	Economic Reason:								
Permits	Lake Influence Fact %:								
Photos	Lake Influence Reason: (None) – (None)								
Sketch	Dwelling Percent Complete:								
Split/Combine History									
Lower Level/Basement & Other Features									
Masonry Trim Area:	182								
Unfinished Area:	0								
Rec Room Area:	0								
Finished Basement Living Area:	0								
Finished Lower Level Area:									
Addition Details									
Card #	Line #	Lower	First	Second	Third	Year Built	Area	Grade	CDU
1	0	-	-	-	-	1955	778 48	- Avg+	AV
1	1	53 - CRAWL	10 - 1s FR FRAME	71 - 1s FR FRAME (UPPER)	-	1955	743 48	- Avg+	AV
1	2	53 - CRAWL	10 - 1s FR FRAME	-	-	1955	527 48	- Avg+	AV
1	3	-	11 - OFP OPEN FRAME PORCH	71 - 1s FR FRAME (UPPER)	-	1955	5 48	- Avg+	AV



COST Tab

Additional Cost Adjustments

Adjustments	Quantity	Unit Cost	Item Cost

Cost Data Reference (source or name): _____

Some Assessors will have readily available data that can help. If not the photos, data, and measurements in the field are needed for any added features such as fireplaces, porches, etc.

Improvement Details			
Bldg/Addn	#	Description	Units
1 of 1		101 / Single-Family / Owner Occupied	
		1 Story Frame	1,845 SF
		Adjustment for basement	
		Central Air	1,845 SF
	#1	Porch: 1S Frame Open	38 SF
	#1	Deck: Wood Deck-Med	543 SF
	#2	Deck: Concrete Patio-Med	84 SF
		Plumbing	7
	#1	Fireplace: Masonry w/1 Extra, 1 Story	1
		Garage: Att Frame, 0' X 0'	625 SF
	BEx	FBAY	3
	BEx	SKYLITES	4
	BEx	CRAWLSPACE	2305
Addn	#1	2 Story Frame	680 SF

SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Damage Undetermined: _____ (check here and check the reason below):

____ No Physical Damage Sustained ____ Vacant / Property ____ Resident Refused Inspection
____ Address Does Not Exist ____ Other (Explain)

_____ Flood depth based on
_____ Debris lines,
_____ Highwater
_____ Marks or any
_____ inundation
_____ maps

Duration of Flood: _____ Hours _____ Days

Depth of Flood Above Ground (estimated to nearest 0.5 foot): _____

Depth of Flood Above Lowest Floor (estimated to nearest 0.5 foot): _____

NFIP / Community Information

FIRM Panel Number: _____ Suffix: _____ Date of FIRM Panel (mm/dd/yyyy): _____

FIRM Zone: _____ Base Flood Elevation: _____

Regulatory Floodway: ____ Yes ____ No ____ Possible

Community Information (if needed): _____

_____ Take Base
_____ Flood
_____ Elevations
_____ from maps



SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Damage Undetermined: _____ (check here and check the reason below):

____ No Physical Damage Sustained ____ Vacant / Property ____ Resident Refused Inspection
____ Address Does Not Exist ____ Other (Explain)

Duration of Flood: _____ Hours _____ Days

Depth of Flood Above Ground (estimated to nearest 0.5 foot): _____

Depth of Flood Above Lowest Floor (estimated to nearest 0.5 foot): _____

NFIP / Community Information

FIRM Panel Number: _____ Suffix: _____ Date of FIRM Panel (mm/dd/yyyy): _____

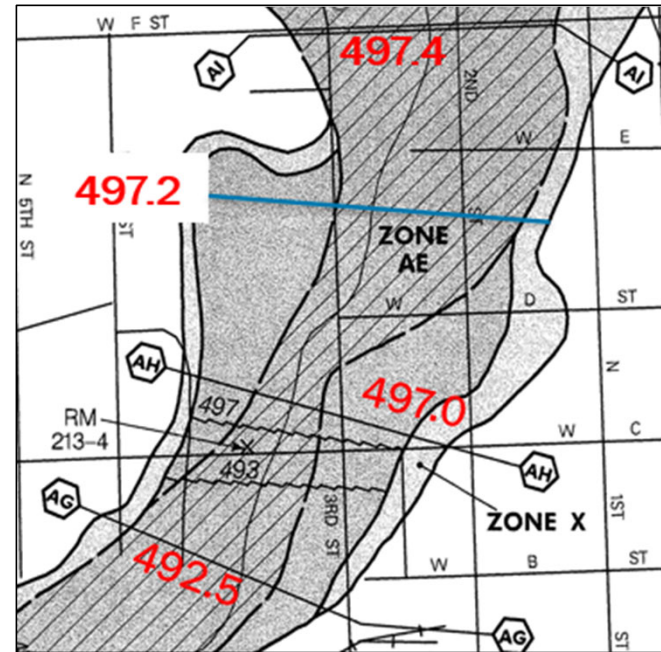
FIRM Zone: _____ Base Flood Elevation: _____

Regulatory Floodway: ____ Yes ____ No ____ Possible

Community Information (if needed): _____

Flood depth based on debris lines or highwater marks

Make sure you note if this is depth is in a basement or first floor with full basement or full crawlspace



Take Base Flood Elevations from maps

SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Damage Undetermined: _____ (check here and check the reason below):

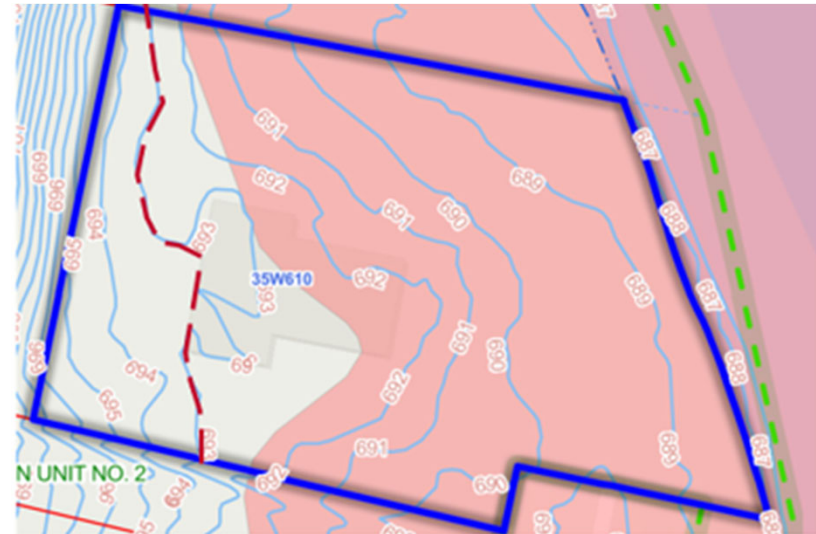
____ No Physical Damage Sustained ____ Vacant / Property ____ Resident Refused Inspection
____ Address Does Not Exist ____ Other (Explain)

Duration of Flood: _____ Hours _____ Days

Depth of Flood Above Ground (estimated to nearest 0.5 foot): _____

Depth of Flood Above Lowest Floor (estimated to nearest 0.5 foot): _____

Flood depth
based on
debris lines
or highwater
marks



You can check the flood depth between an inspection and a highwater mark. If you have a highwater mark at 693 and you know the ground near the front door is at about 692.5. You can look at a photo of the house showing two steps up front door. Step height around 7 inches and a few extra inches over the threshold. That gives about 16 inches to the top of the first floor. That puts the floor at 693.8.

Therefore, no water of first floor is expected, but the crawlspace and the duct work (if in the floor) would be flooded. If any mechanicals are in the crawlspace, they are damaged and the A/C unit, if at grade.

If the flooding was higher than the damages will include about flooring, drywall, cabinets, etc.

ELEMENT PERCENTAGE Tab

Note: The inspector needs only enter the % Damaged data here. The data in the Element %, Item Cost, and Damage Values columns will be populated based on the selected attributes once all the data are entered into the SDE tool.

Residence Type: Single-Family (SF) House Townhouse Manufactured House (MH)

Item	% Damaged	Element %	Item Cost	Damage Values
Foundation (not required for MH)				
Superstructure				
Roof Covering				
Exterior Finish				
Interior Finish				
Doors and Windows				
Cabinets and Countertops				
Flood Finish				
Plumbing				
Electrical				
Appliances				
HVAC				
Skirting / Forms Piers (MH only)				

SDE OUTPUT SUMMARY Tab – Optional User Entered Data

Professional Market Appraisal: _____

Tax Assessed Value: _____ Tax Factor Adjustment: _____

Adjusted Tax Assessed Value: _____

Contractor's Estimate of Damage: _____

Community's Estimate of Damage: _____

State of Illinois Flood Damage Assessment Packet

A cooperative effort by:

Illinois Department of Natural Resources / Office of Water Resources

Illinois Emergency Management Agency

Federal Emergency Management Agency



March 2020

Includes Information On:

- Steps to Take Following a Flood
- Substantial Damage Determinations
- Damage Assessment Worksheet
- FEMA Substantial Damage Estimator (SDE)
- Sample Building Notice
- Sample Substantial Damage letter
- Sample Press Release
- Information on mitigation programs



ILLINOIS DAMAGE ASSESSMENT 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 for residential buildings, quickly calculating 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.

	Super-structure	Exterior Finish	Interior Finish	Doors and Windows	Cabinets and Counters	Flooring	Plumbing	Electrical	Built in Appliances	HVAC
FLOOD DEPTH										
1 – 3 Inches	10	0	0	0	0	100	0	0	0	0
0.5 feet	10	5	5	10	20	100	0	0	0	0
1 foot	10	10	10	15	50	100	20	0	50	80
2 foot	10	30	30	40	50	100	30	20	100	80
3 foot	25	40	40	40	50	100	30	30	100	80
4 foot	25	50	50	75	70	100	30	60	100	80
>5 foot	50	50	100	100	100	100	50	80	100	80
Two story =	*	*	*	*		*	**	**		

For two story buildings the percentage for each building element is typically reduced as follows:

* = Reduce by 40 – 50% for two story home

** = Reduce by 25% for two story home

For split-level buildings use your best judgement for any adjustments to the damage percentages

Foundation

Basement or crawlspace:

10% minor 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

10% damage unless the foundation is undermined

30% if foundation is undermined

75% if foundation is broken or bowed or uplift

SDE Example – Enter Default Data

The screenshot shows a software interface with two main sections: 'Access Data' and 'Resources'. The 'Access Data' section contains six buttons: 'View/Search All Records' (magnifying glass icon), 'Bulk Editor' (pencil icon), 'Enter Default Data' (document with pencil icon, highlighted with a red arrow), 'Add New Property' (document with plus icon), 'Add New Residential Assessment' (house icon), and 'Add New Non-Residential Assessment' (building icon). The 'Resources' section contains eight buttons: 'User Manual' (open book icon), 'Web References' (globe with arrow icon), 'Reports, Imports/Exports, and GeoFiles' (text label), 'Saved Enterprise Import Mappings' (table icon), 'Import/Export Functions' (database with arrows icon), 'View Reports' (document with bar chart icon), and 'Generate GeoFile' (map icon).

Community

State

Zip Code

NFIP Community Number

County

Date of Floodplain Map

SDE Substantial Damage Estimator 3.0

Default Data

Check Spelling Clear All Values Delete Save

Address / Structure Information

City: East St. Louis
State: Illinois
County/Parish: St Clair
Zip Code:
Year of Construction:
Datum: 1929

Cost Information

Base Cost:

Inspector / Damage Information

Date Damage Occurred: 7/26/2022
Cause of Damage: Flood
Duration of Flood: 4.00 Days
Geographic Adjustment: 1.01
Cost Data Date: 8/8/2022
Inspector Name:
Inspector Phone:
Assessment Date:
Cost Data Reference: RS Means

NFIP / Community Information

NFIP Community Name: East St. Louis
NFIP Community ID: 170626
FIRM Panel Number:
FIRM Zone: Make Selection...
Date of FIRM Panel: 11/5/2003
Suffix: Make Selection...
Base Flood Elevation:
Regulatory Floodway: No

Space for Community Specific Information:

Empty text area for community specific information.



SDE Example – Adding Properties



Step 1

Build a list of properties
Using Add New Property

SDE Substantial Damage Estimator 3.0

Property Details



Property Data

Structure Owner First Name

Structure Owner Last Name

Street Number

Street Name

Street Suffix

City

State

County/Parish

Zip Code

Parcel Number

Lot Number

Year of Construction

Latitude

Longitude

Structure Type

NFIP Information

NFIP Community Name

NFIP Community ID

FIRM Panel Number

FIRM Zone

Date of FIRM Panel

Suffix

Base Flood Elevation

Regulatory Floodway

Custom Fields

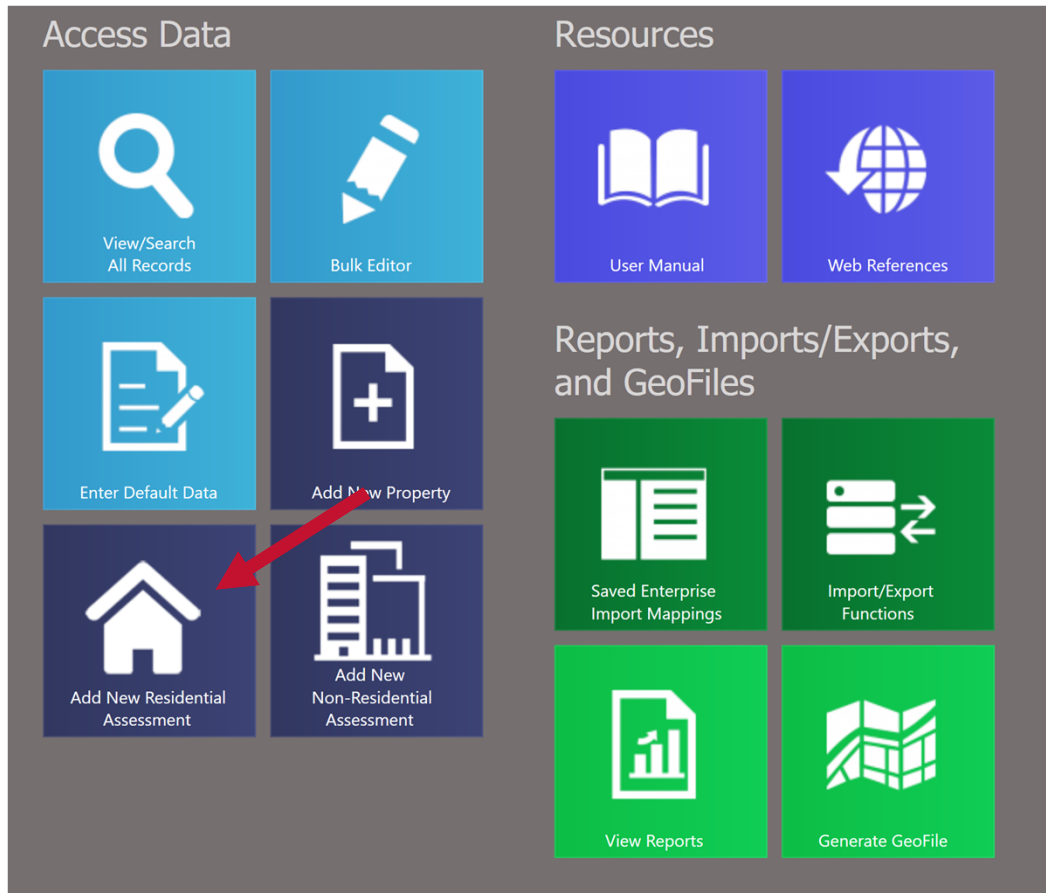
Custom Field 1

Custom Field 2

Custom Field 3



SDE Example – Adding Properties



Step 2

After the properties are entered, you will

Add New Residential Assessment or Add New Non-Residential Assessment

Access Data



View/Search
All Records



Enter Default Data



Add New Residential
Assessment

Please Select a Property

Structure Owner Name	Property Address	County/Parish	Parcel Number	Lot Number	Subdivision	Year of Construction
Wesley Rencher	712 Terrace Drive	St Clair				1970
Zenobia Summers	6764 Mary Avenue	St Clair				1951
Tramell Slaughter	6761 Mary Avenue	St Clair				1956
Mamie Weatherby	801 N 70th Street	St Clair	02220414016			1955
June Brown	760 Terrace Drive	St Clair				1961
Steven Drew	1 Terrace Court	St Clair				1959
Westley Rencher	6765 Mary Avenue	St Clair				1956
MLCP Asset Co Inc	6780 Mary Avenue	St Clair				1951
Andre Williams	728 N 68th Street	St Clair				1951
Illinois Realty Group Ho...	6769 Mary Avenue	St Clair				1956
Louis Sanders	6779 Mary Avenue	St Clair				1956
Henry Walker	6783 Mary Avenue	St Clair				1956
Elvira Jones	6784 Mary Avenue					1951
Henry Walker	6774 Mary Avenue	St Clair				1951
Lillian Cook	6770 Mary Avenue	St Clair				1950
Cheryl Bell	6773 Mary Avenue	St Clair				1956
Trevorous Ellison	3 Terrace Court					1959
Sanchez Ford	4 Terrace Court	St Clair				1961
David Bevineau	750 N 68th Street	St Clair				1950

Preload using default values.

New Property

Use Selected Property

Residential Assessment

Be sure to SAVE assessment record before generating a report.

Print Summary Report

Print Detailed Report

No Photo Available



636 Terrace Drive
East St. Louis
Illinois

Damage Date:

Assessment Date:
9/6/2022

Percent Damaged:
%

Address	Structure/Damage/NFIP	Cost	Element Percentages	Output Summary	Photos
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <h3>Subdivision / Community</h3> <p>Subdivision: <input type="text"/></p> <p>Parcel Number: <input type="text"/></p> <p>Lot Number: <input type="text"/></p> <p>Elevation of Lowest Floor: <input type="text"/></p> <p>Datum: <input type="text"/></p> <p>NFIP Community ID: <input type="text" value="170626"/></p> <p>NFIP Community Name: <input type="text" value="East St. Louis"/></p> <p>Latitude: <input type="text"/></p> <p>Longitude: <input type="text"/></p> </div> <div style="width: 30%;"> <h3>Structure Address</h3> <p>Structure Owner First Name: <input type="text"/></p> <p>Structure Owner Last Name: <input type="text"/></p> <p>Street Number: <input type="text" value="636"/></p> <p>Street Name: <input type="text" value="Terrace"/></p> <p>Street Suffix: <input type="text" value="Drive"/></p> <p>City: <input type="text" value="East St. Louis"/></p> <p>State: <input type="text" value="Illinois"/></p> <p>County/Parish: <input type="text" value="St Clair"/></p> <p>Zip Code: <input type="text" value="62203"/></p> </div> <div style="width: 30%;"> <h3>Mailing Address</h3> <p><input type="checkbox"/> Check if same as Structure Address.</p> <p>Mailing Owner First Name: <input type="text"/></p> <p>Mailing Owner Last Name: <input type="text"/></p> <p>Mailing Street Number: <input type="text"/></p> <p>Mailing Street Name: <input type="text"/></p> <p>Mailing Street Suffix: <input type="text" value="Make Selection..."/></p> <p>Mailing City: <input type="text"/></p> <p>Mailing State: <input type="text" value="Make Selection..."/></p> <p>Mailing County/Parish: <input type="text" value="Select a State First"/></p> </div> <div style="width: 10%;"> <h3>Custom</h3> <p>Custom <input type="text"/></p> <p>Custom <input type="text"/></p> <p>Custom <input type="text"/></p> </div> </div>					

Residential Assessment

! Be sure to **SAVE** assessment record before generating a report.

Print Summary Report

Print Detailed Report

Check S

No Photo Available



Pamela Perry

636 Terrace Drive
East St. Louis
Illinois

Damage Date:
7/26/2022 10:07 PM

Assessment Date:
8/8/2022

Percent Damaged:
%

Address	Structure/Damage/NFIP	Cost	Element Percentages	Output Summary	Photos										
Structure Type: Residential		Inspector Name: IDNR KP		NFIP Community ID: 170626											
Story: One Story (Standard)		Inspector Phone: <input type="text"/>		FIRM Panel Number: 180											
Residence Type: Single Family Residence		Assessment Date: 8/8/2022		Suffix: Make Selection...											
Foundation: Slab - on - Grade		Date Damage Occurred: 7/26/2022		<table border="1"><thead><tr><th>Element</th><th>Description</th></tr></thead><tbody><tr><td>9. Plumbing</td><td><ul style="list-style-type: none">Incoming water service (municipal water supply or well service)Plumbing fixturesWater heaterWater distribution systemWastewater collection and removal system</td></tr><tr><td>10. Electrical</td><td><ul style="list-style-type: none">Electrical wiring systems (junction boxes, circuit breaker panels, distribution wiring, outlets, switches, receptacles)LightingCeiling and exhaust fansElectric baseboard heaters</td></tr><tr><td>11. Appliances</td><td><ul style="list-style-type: none">All built-in, permanent appliances in the structure</td></tr><tr><td>12. HVAC</td><td><ul style="list-style-type: none">The system with which conditioned air is distributed throughout the structure; a typical system in residential structures involves a forced-air heating system with duct workExterior air conditioning unitsHeat pumpsFurnaces</td></tr></tbody></table>		Element	Description	9. Plumbing	<ul style="list-style-type: none">Incoming water service (municipal water supply or well service)Plumbing fixturesWater heaterWater distribution systemWastewater collection and removal system	10. Electrical	<ul style="list-style-type: none">Electrical wiring systems (junction boxes, circuit breaker panels, distribution wiring, outlets, switches, receptacles)LightingCeiling and exhaust fansElectric baseboard heaters	11. Appliances	<ul style="list-style-type: none">All built-in, permanent appliances in the structure	12. HVAC	<ul style="list-style-type: none">The system with which conditioned air is distributed throughout the structure; a typical system in residential structures involves a forced-air heating system with duct workExterior air conditioning unitsHeat pumpsFurnaces
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12. HVAC	<ul style="list-style-type: none">The system with which conditioned air is distributed throughout the structure; a typical system in residential structures involves a forced-air heating system with duct workExterior air conditioning unitsHeat pumpsFurnaces														
Superstructure: Stud-framed (Standard)		Cause of Damage: Flood													
Roof Covering: Shingles - Asphalt, Wood (Standard)		<input type="checkbox"/> Damage Undetermined Make Selection...													
Exterior Finish: Siding or Stucco (Standard)		Duration of Flood: 4.00													
HVAC System: Heating and/or Cooling		Est. Depth of Flood Above Gr 3.00													
Year of Construction: 1970		Est. Depth of Flood Above Lowest Floor: 2.50													
Quality:															

it

Be sure to **SAVE** assessment record before generating a report.

Print Summary Report

Print Detailed Report

Check Spelling

Address Structure/Damage/NFIP Cost

Square Footage

Click to calculate or enter square footage:



Cost Adjustments

- Adjustments:
 - Roofing
 - Heating / Cooling
 - Appliances
 - Fireplaces
 - Porch / Breezeways
 - Garage

Additional Adjustments

Adjustments:	Quantity:	Unit Cost:	Adjustment Cost:
	0.00	\$0.00	\$0.00

Square Foot Calculator

Select a shape to add it to the structure:



Enter Total Square Footage Manually

Save and Close

Square Foot Breakdown

Shape Type	Total Footage	Edit	Delete
Custom Shape	1248	Edit	Delete

SDE Example

Address Structure/Damage/NFIP Cost Element Percentages Output Summary Photos

Square Footage

Click to calculate or enter square footage:

Cost Adjustments

- Adjustments
- Roofing
- Heating / Cooling
- Appliances
- Fireplaces
- Porch / Breeds
- Garage

Additional Adjustments

Adjustments:

Quantity:

Unit Cost:

Adjustment Cost:

\$0.00

Square Foot Calculator

Select a shape to add it to the structure:



Enter Total Square

Save

Square Foot Breakdown

Shape Type

No Shape

Enter Total Square Footage:

Save

Close (No Save)

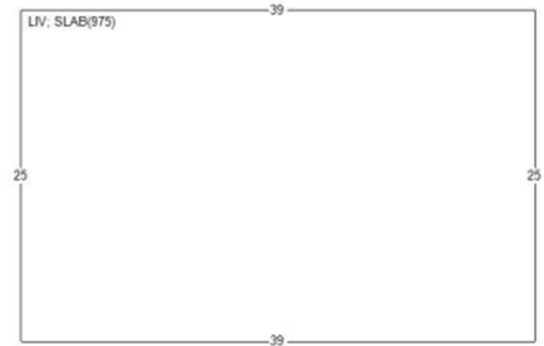
Page 1 of 1

Req By: ANN
PERRY PAMELA
636 TERRACE DR

07/29/22 6:16:13

Site Address: EAST SAINT LOUIS IL 62203
000636 TERRACE DR

tory
r
e Fami
rame
asonry



xtures

DU - P

BOOK

PERM

AREA	FLAT	EFF% E/AREA	ACT% A/AREA	EA/AA HEATED	NBHD
LIV	975	1.00	975	1.00	975
SLAB	975	1.00	975	1.00	975

Appr
Appr
Use

SDE Example

Residential Assessment

No Photo Available



Pamela Perry

636 Terrace Drive
East St. Louis
Illinois

Damage Date:
7/26/2022 10:07 PM

Assessment Date:
8/8/2022

Percent Damaged:
%

Be sure to **SAVE** assessment record before

Address Structure/Damage/NFIP Cost Element Percentages Output Summary Photo

Square Footage

Click to calculate or enter square footage:



Base Cost:

\$0.00

Geographic Adjustment:

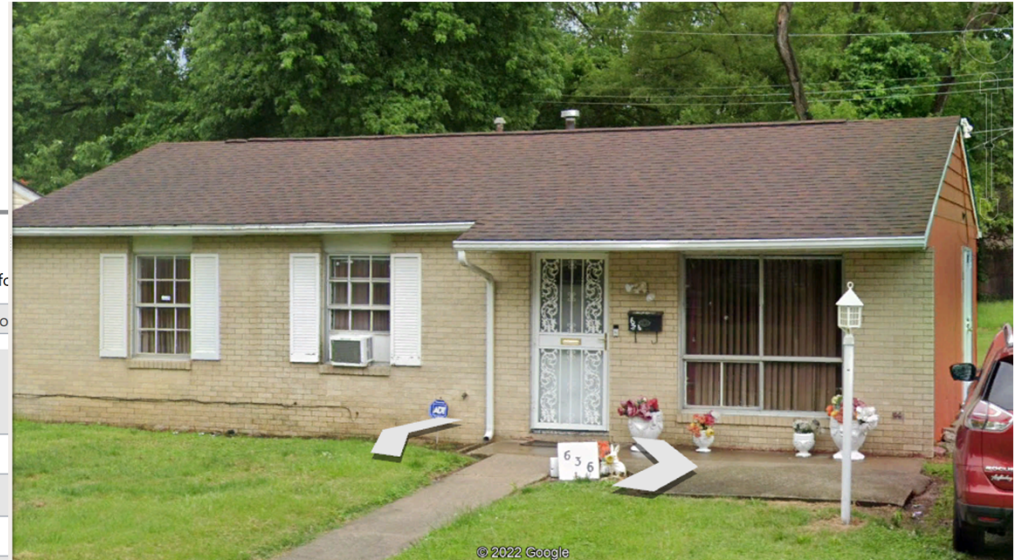
0.00

Cost Adjustments

Adjustments:	Quantity:	Unit:
Roofing	0.00	Sq Ft
Heating / Cooling	0.00	Ea
Appliances	0.00	Ea
Fireplaces	0.00	Ea
Porch / Breezeways	0.00	Sq Ft
Garage	0.00	Sq Ft

Additional Adjustments

Adjustments:	Quantity:
	0.00



Using RS Means

Economy Home has no masonry option

Economy - Wood Siding 800 - \$143.90

975 - \$133.80

1000 - \$132.35

Economy - Brick veneer 800- \$149.45

975 - \$138.9

1000- \$137.40

$$(.75 \times 133.8) + (.25 \times 138.9) = \$135$$

⚠ Be sure to **SAVE** assessment record before generating a report.

Print Summary Report

Print Detailed Report

Check Spelling

Save

Address Structure/Damage/NFIP Cost Element Percentages Output Summary Photos Assessment of 11/15/2022

Square Footage

Click to calculate or enter square footage:



Base Cost:

? \$155.00

Geographic Adjustment:

? 1.01

Total Square Footage:

1,248.00

Cost:

\$195,374.40

Computed Actual Cash Value

Total Adjustments: **\$0.00**

Replacement Cost: **\$195,374.40**

Replacement Cost Per Sq Ft: **\$156.55**

Cost Data Reference:

RS Means

Cost Data Date:

11/16/2022

Depreciation Rating:

4 - Average Condition

Depreciation Percentage:

? 24.2%

Computed Actual Cash Value:

? **\$148,093.80**

Cost Adjustments

Adjustments:	Quantity:	Unit:	Unit Cost:	Adjustment Cost:
Roofing	0.00	Sq Ft	\$0.00	\$0.00
Heating / Cooling	0.00	Ea	\$0.00	\$0.00
Appliances	0.00	Ea	\$0.00	\$0.00
Fireplaces	0.00	Ea	\$0.00	\$0.00
Porch / Breezeways	0.00	Sq Ft	\$0.00	\$0.00
Garage	0.00	Sq Ft	\$0.00	\$0.00

Additional Adjustments

Adjustments:	Quantity:	Unit Cost:	Adjustment Cost:
	0.00	\$0.00	\$0.00

ILLINOIS DAMAGE ASSESSMENT 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 for residential buildings, quickly calculating 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.

	Super-structure	Exterior Finish	Interior Finish	Doors and Windows	Cabinets and Counters	Flooring	Plumbing	Electrical	Built in Appliances	HVAC
FLOOD DEPTH										
1 – 3 Inches	10	0	0	0	0	100	0	0	0	0
0.5 feet	10	5	5	10	20	100	0	0	0	0
1 foot	10	10	10	15	50	100	20	0	50	80
2 foot	10	30	30	40	50	100	30	20	100	80
3 foot	25	40	40	40	50	100	30	30	100	80
4 foot	25	50	50	75	70	100	30	60	100	80
>5 foot	50	50	100	100	100	100	50	80	100	80
Two story =	*	*	*	*		*	**	**		

For two story buildings the percentage for each building element is typically reduced as follows:

* = Reduce by 40 – 50% for two story home

** = Reduce by 25% for two story home

For split-level buildings use your best judgement for any adjustments to the damage percentages

Foundation

Basement or crawlspace:

10% minor 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

10% damage unless the foundation is undermined

30% if foundation is undermined

75% if foundation is broken or bowed or uplift

Residential Assessment

! Be sure to **SAVE** assessment record before generating a report.

[Print Summary Report](#)

[Print Detailed Report](#)

[Check Spelling](#)

No Photo Available



- Address
- Structure/Damage/NFIP
- Cost
- Element Percentages**
- Output Summary
- Photos

Element Percentages

Element:	Percent Damaged:	Element Percentage:	Element Cost:	Damage Values:
Foundation:	<input type="text" value="0.0%"/>	8 %	\$10,635.30	\$0.00
Superstructure:	<input type="text" value="0.0%"/>	15.9 %	\$21,137.66	\$0.00
Roof Covering:	<input type="text" value="0.0%"/>	4.3 %	\$5,716.47	\$0.00
Exterior Finish:	<input type="text" value="30.0%"/>	7 %	\$9,305.89	\$2,791.77
Doors and Windows:	<input type="text" value="40.0%"/>	15.8 %	\$21,004.72	\$8,401.89
Cabinets and Countertops:	<input type="text" value="50.0%"/>	4.5 %	\$5,982.36	\$2,991.18
Floor Finish:	<input type="text" value="100.0%"/>	7.9 %	\$10,502.36	\$10,502.36
Plumbing:	<input type="text" value="20.0%"/>	8.6 %	\$11,432.95	\$2,286.59
Electrical:	<input type="text" value="20.0%"/>	4.9 %	\$6,514.12	\$1,302.82
Appliances:	<input type="text" value="50.0%"/>	4.2 %	\$5,583.53	\$2,791.77
Interior Finish:	<input type="text" value="50.0%"/>	13.2 %	\$17,548.25	\$8,774.12
HVAC:	<input type="text" value="80.0%"/>	5.7 %	\$7,577.65	\$6,062.12

Replacement Cost: Computed Damages:

\$132,941.25 **\$45,904.61**

Estimated 2 feet over first floor

Pamela Perry

East St. Louis
Illinois

Damage Date:
7/26/2022 10:07 PM

Assessment Date:
8/8/2022

Percent Damaged:
45.6 %

Residential Assessment

! Be sure to **SAVE** assessment record before generating a report.

[Print Summary Report](#)

[Print Detailed Report](#)

No Photo Available



Ittie Thompson

East St. Louis
Illinois

Damage Date:
7/28/2022 12:27 PM

Assessment Date:
8/8/2022

Percent Damaged:
100.0 %

- Address
- Structure/Damage/NFIP
- Cost
- Element Percentages**
- Output Summary
- Photos

Element Percentages

? Element:	Percent Damaged:	Element Percentage:	Element Cost:	Damage Values:
Foundation:	<input type="text" value="0.0%"/>	9 %	\$12,030.26	\$0.00
Superstructure:	<input type="text" value="0.0%"/>	16.4 %	\$21,921.81	\$0.00
Roof Covering:	<input type="text" value="0.0%"/>	4.3 %	\$5,747.79	\$0.00
Exterior Finish:	<input type="text" value="5.0%"/>	6.9 %	\$9,223.20	\$461.16
Doors and Windows:	<input type="text" value="10.0%"/>	15.5 %	\$20,718.79	\$2,071.88
Cabinets and Countertops:	<input type="text" value="20.0%"/>	4.4 %	\$5,881.46	\$1,176.29
Floor Finish:	<input type="text" value="100.0%"/>	7.7 %	\$10,292.56	\$10,292.56
Plumbing:	<input type="text" value="0.0%"/>	8.4 %	\$11,228.25	\$0.00
Electrical:	<input type="text" value="0.0%"/>	4.8 %	\$6,416.14	\$0.00
Appliances:	<input type="text" value="0.0%"/>	4.1 %	\$5,480.45	\$0.00
Interior Finish:	<input type="text" value="5.0%"/>	13 %	\$17,377.05	\$868.85
HVAC:	<input type="text" value="0.0%"/>	5.5 %	\$7,351.83	\$0.00

Replacement Cost: Computed Damages:

Estimated 0.5 feet over first floor

\$133,669.60 **\$14,870.74**

SDE Example

Residential Assessment

! Be sure to **SAVE** assessment record before generating a report.

Print Summary Report

Print Detailed Report

Check Spelling

Save

No Photo Available



Pamela Perry

East St. Louis

Illinois

Damage Date:

7/26/2022 10:07 PM

Assessment Date:

8/8/2022

Percent Damaged:

100.0 %

Address Structure/Damage/NFIP Cost Element Percentages Output Summary Photos

Percent Damaged

To ensure consistency and equity, local officials responsible for substantial damage determinations are strongly encouraged to select only one method each for determining structure values and repair costs and to use the selected methods for the entire community. Computed damages based on element percentages within the software can only be derived from a replacement value. You can't use an appraisal or adjusted tax value which are both market values.

Basis for value of Structure (Select One...)

- Computed Actual Cash Value
- Professional Market Appraisal
- Adj. Tax Assessed Value

Basis for cost of Repairs/Improvements (Select One...)

- Computed Damages
- Contractor Estimate
- Community Estimate

Percent Damaged:

User Entered Data (Optional)

Market Value Determination

Professional Market Appraisal:

\$0.00

Tax Assessed Value:

\$4,640.00

Tax Factor Adjustment: ?

3.00

Adjusted Tax Assessed Value:

\$13,920.00

Cost of Damage

Contractor Estimate:

\$0.00

Community Estimate:

\$0.00

Damage Summary

Replacement Cost:
\$132,941.25

Computed Damages:
\$45,904.61

Depreciation Percentage:
24.2 %

Computed Actual Cash Value:
\$100,769.47

Percent of Existing Improvements
and Repairs Pre-Disaster:
0.00

Repair/Reconstruction Percentage:
45.6 %

*Per FEMA Publication 213, actual cash may be used as market value.

SDE Example

Owner's Name Street Address City East St. Louis County/Parish St Clair State Illinois Zip 62203 Phone		<p>No Photo Available</p> 
Structure Information Year of Construction 1970 Residence Type Single Family Residence Quality Budget		
Damage Information		
Date of Assessment 08/08/2022 Inspector Name IDNR KP Inspector Phone	Date of Damage 07/26/2022 Cause of Damage Flood Duration of Flood 4 Days Est. Depth of Flood Above Lowest Floor 2.50	Residence Information Home is 75% Frame and 25% masonry. Adjustment will be made on cost per square foot
NFIP Information		
Firm Panel # 180 Suffix D Date of FIRM Panel 11/05/2003 Firm Zone AH BFE 718.00 Regulatory Floodway No		
Percent Damaged		
Basis for Value of Structure \$13,920.00 Adj. Tax Assessed Value	Percent Damaged 100.0 % Substantially Damaged	Basis for Cost of Repairs \$45,904.61 Computed Damages
Damage Summary		
Replacement Cost \$132,941.25 Depreciation % 24.2 % Computed Actual Cash Value* \$100,769.47	Computed Damages \$45,904.61 Percent of Existing Improvements and Repairs Pre-Disaster 0.0 % Repair/Reconstruction % 45.6 %	

SDE Example - Reports

Substantial Damage Estimator 3.0

Main Menu File Tools Custom Fields Database Functions Import/Export Reports Help

SDE Substantial Damage Estimator 3.0

Access Data


- View/Search All Records
- Bulk Editor
- Enter Default Data
- Add New Property
- Add New Residential Assessment
- Add New Non-Residential Assessment

Resources

- User Manual
- Web References

Reports, Imports/Exports, and GeoFiles

- Saved Enterprise Import Mappings
- Import/Export Functions
- View Reports
- Generate GeoFile

 SDE is a tool provided by FEMA to help local officials administer the substantial damage requirements of their floodplain man...

SDE Example - Report

View Search Records (Total Number of Records: 43)

To view property cards, enter search criteria and then click Filter button.

Structure Type:

Select Custom Field:

Sort By Value:

Assessment Date: From: To:

Select Field:


Sort By Order: Asc. Desc.

Search For:

Properties Only: (shows only properties without assessments)

Percent Damaged: Min: Max:

No Photo Available




Assessment Date:
8/8/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

No Photo Available




Assessment Date:
8/8/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

No Photo Available




Assessment Date:
11/13/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

No Photo Available




Assessment Date:
11/13/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

No Photo Available




Assessment Date:
9/6/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

No Photo Available




Assessment Date:
11/13/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

No Photo Available




Assessment Date:
11/13/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

No Photo Available



Assessment Date:
11/13/2022

Address:
[Redacted]

Damage:
100.0%
Substantially Damaged

SDE Substantial Damage Estimator 3.0

View Search Records (Total Number of Records: 43)

To view property cards, enter search criteria and then click Filter button.

Structure Type:

Select Custom Field:

Sort By Value:

Percent Damaged: Max:

Current Record Detail

No Photo Available



Structure Owner:

Address:

NFIP Community ID:
170626

NFIP Community:
East St. Louis

Assessment Date:
11/13/2022

Inspector:
IDNR

Percent Damaged:
100.0%

No Photo Available



Assessment Date:
8/8/2022

Address:

Damage:
100.0%
Substantially Damaged

No Photo Available



No Photo Available



Assessment Date:
9/6/2022

Address:

Damage:
100.0%
Substantially Damaged

No Photo Available



SDE Substantial Damage Estimator 3.0

Residential Assessment

! Be sure to **SAVE** assessment record before generating a report.

Print Summary Report

Print Detailed Report

Check Spelling

- Address
- Structure/Damage/NFIP
- Cost
- Element Percentages
- Output Summary
- Photos

No Photo Available



Delvin Hill

East St. Louis
Illinois

Damage Date:
11/13/2022 9:54 PM

Assessment Date:
11/13/2022

Percent Damaged:
100.0 %

Percent Damaged

To ensure consistency and equity, local officials responsible for substantial damage determinations are strongly encouraged to select only one method each for determining structure values and repair costs and to use the selected methods for the entire community. Computed damages based on element percentages within the software can only be derived from a replacement value. You can't use an appraisal or adjusted tax value which are both market values.

Basis for value of Structure (Select One...)

- Computed Actual Cash Value
- Professional Market Appraisal
- Adj. Tax Assessed Value

Basis for cost of Repairs/Improvements (Select One...)

- Computed Damages
- Contractor Estimate
- Community Estimate

User Entered Data (Optional)

Market Value Determination

Professional Market Appraisal:

\$0.00

Tax Assessed Value:

\$4,592.00

Tax Factor Adjustment: ?

3.00

Adjusted Tax Assessed Value:

\$13,776.00

Cost of Damage

Contractor Estimate:

\$0.00

Community Estimate:

\$0.00

Damage Summary

Replacement Cost:
\$119,197.17

Computed Damages:
\$15,227.44

Depreciation Percentage:
38.8 %

Computed Actual Cash Value:
\$72,948.67

Percent of Existing Improvements
and Repairs Pre-Disaster:
0.00

Repair/Reconstruction Percentage:
20.9 %

**Per FEMA Publication 213, actual cash may be used as market value.*

Substantial Damage Estimator

Subdivision		Community	
Subdivision	Elev. of Lowest Floor	NFIP Community Name	East St. Louis
Parcel #	ft.	NFIP Community ID #	170626
Lot #	Datum 1929	Latitude	Longitude 0.000000

Structure Address

Owner's Name
Street Address
City East St. Louis
County/Parish St. Clair
State Illinois
Zip 62203
Phone

No Photo Available



Structure Information

Year of Construction 1951

Residence Type Single Family Residence
Quality Budget

Damage Information

Date of Assessment	11/13/2022	Date of Damage	11/13/2022	Residence Information
Inspector Name	IDNR	Cause of Damage	Flood	
Inspector Phone		Duration of Flood	3 Days	
		Est. Depth of Flood Above Lowest Floor	0.50	

NFIP Information

Firm Panel #	Suffix	Date of FIRMPanel	Firm Zone	BFE	Regulatory Floodway
180	D	11/05/2003	AH	418.00	No

Percent Damaged

Basis for Value of Structure	Percent Damaged	Basis for Cost of Repairs
\$13,776.00	100.0 %	\$15,227.44
Adj. Tax Assessed Value	Substantially Damaged	Computed Damages

Damage Summary

Replacement Cost	\$119,197.17	Computed Damages	\$15,227.44
Depreciation %	38.8 %	Percent of Existing Improvements and Repairs Pre-Disaster	0.0 %
Computed Actual Cash Value*	\$72,948.67	Repair/Reconstruction %	19.8 %
		Other Depreciation Explanation	

* Per FEMA Publication 213, Actual Cash Value may be used as Market Value.

Optional User Entered Data

Professional Market Appraisal	\$0.00	Contractor Estimate
Tax Assessed Value	\$4,592.00	\$0.00
Factor Adjustment	3	Community Estimate
Adjusted Tax Assessed Value	\$13,776.00	\$0.00

Authorized Local Official : _____ Signature _____ Printed Name _____
Wednesday, November 16, 2022 Page 1 of 1

Firm Panel #	Suffix	Date of FIRMPanel	Firm Zone	BFE	Regulatory Floodway
180	D	11/05/2003	AH	418.00	No

Percent Damaged

Basis for Value of Structure	Percent Damaged	Basis for Cost of Repairs
\$13,776.00	100.0 %	\$15,227.44
Adj. Tax Assessed Value	Substantially Damaged	Computed Damages

Damage Summary

Replacement Cost	\$119,197.17	Computed Damages	\$15,227.44
Depreciation %	38.8 %	Percent of Existing Improvements and Repairs Pre-Disaster	0.0 %
Computed Actual Cash Value*	\$72,948.67	Repair/Reconstruction %	19.8 %
		Other Depreciation Explanation	

* Per FEMA Publication 213, Actual Cash Value may be used as Market Value.

Optional User Entered Data

Professional Market Appraisal	\$0.00	Contractor Estimate
Tax Assessed Value	\$4,592.00	\$0.00
Factor Adjustment	3	Community Estimate
Adjusted Tax Assessed Value	\$13,776.00	\$0.00

Authorized Local Official : _____ Signature _____ Authorized Local Official : _____ Printed Name _____
Wednesday, November 16, 2022 Page 1 of 1

Summary Report – Attach to the Substantial Damage/ Damage Assessment Letter

SDE Example - Report

SDE Substantial Damage Estimator 3.0

Main Menu File Tools Custom Fields Database Functions Import/Export Reports Help

(Database Name: (Database Name Not Entered))

SDE Substantial Damage Estimator 3.0

Reports Note: The reports are based on the filters below. If no structure type is selected, the tool will display all.

Filter By:

Structure Type:

Use Inspection Date?

Display report(s) without photos?

Percent Damaged:
Min: Max:

Select Field:

Search For:

1 of 14 Find Next

SDE Structure and Percent Damage Report

Community NFIP ID and Name: 170626 East St. Louis

617 Terrace Drive, East St. Louis, Illinois 62203

Assessment Date: 08/08/2022

Owner Name	City & State	County/Parish	Percent Damaged	Other Depreciation Explanation
John Doe	East St. Louis, Illinois	St Clair	100.0 %	



ELEMENT PERCENTAGE Tab

Note: The inspector needs only enter the % Damaged data here. The data in the Element %, Item Cost, and Damage Values columns will be populated based on the selected attributes once all the data are entered into the SDE tool.

Residence Type: _____ Single-Family (SF) House _____ Townhouse _____ Manufactured House (MH)

Item	% Damaged
Foundation (not required for MH)	
Superstructure	
Roof Covering	
Exterior Finish	
Interior Finish	
Doors and Windows	
Cabinets and Countertops	
Flood Finish	
Plumbing	
Electrical	
Appliances	
HVAC	
Skirting / Forms Piers (MH only)	

SDE OUTPUT SUMMARY Tab – Optional User Enters

Professional Market Appraisal: _____

Tax Assessed Value: _____ Tax

Adjusted Tax Assessed Value: _____

Contractor's Estimate of Damage: _____

Community's Estimate of Damage: _____

Superstructure (Wood Frame/Masonry)		0-25%	25-50%	50-75%	Over 75%
Description	<p>The wall support systems that extend from the foundation wall to the roof structure. Superstructures include the exterior wall sheathing panels, shear panels, or braced wall panels. This section also includes structural members that support the roof (rafters and trusses), but does not include the roof sheathing.</p> <p>Wood frame construction: Lightweight lumber or metal studs Interior wall framing (without sheathing) Typical exterior structural panel wall sheathing is plywood or hardboard</p> <p>Masonry construction: Load bearing walls using unreinforced masonry (URM) and reinforced block or brick</p> <p>Typical exterior covers are stucco, siding (aluminum, vinyl, or wood), and masonry veneer (Reinforced concrete construction should be categorized under masonry.)</p>	<p>Water level does not rise to the level of the bottom of the first floor of the structure.</p> <p>No damage to the roof framing.</p>	<p>Water level rises just above first floor level.</p> <p>Damage to the exterior walls is limited</p> <p>Damage to the roof framing is limited.</p>	<p>Water level is up to 3 feet high on the first floor level.</p> <p>Some damage to exterior walls.</p> <p>Significant damage to sections of the roof framing.</p>	<p>Water is over 3 feet high on the first floor level of the house.</p> <p>Significant damage to exterior walls.</p> <p>Significant damage to the main portion or multiple sections of the roof framing.</p> <p>Missing exterior wall(s) or open damage to large portions of the wall structure. Wall studs and sheathing damaged by contact, collision, or piercing with debris or from floodwater pressures against the structure. Large missing or damaged sections of the roof structure. Significant deformation or distortion of the structural frame is evident.</p>
	Threshold Markers				
	Common Damage				
	<p>Special Considerations for Coastal/High Velocity Floods</p>	<p>Coastal areas have higher wind conditions requiring additional exterior wall structural panels, shear walls, and braced wall panels.</p> <p>Damage to these wall structural systems would indicate a higher percent of damage, because they are already designed to resist higher wind conditions.</p>			

Notification of Property Owner

- Substantial Damage Determination Letters will need to be delivered regardless of damage percentage
- What methods of delivering notices to homeowners?
 - Hand delivery
 - Registered mail
- Provides information on repair and recovery
- Keep record of date sent, this prevents the “I didn’t get a SD letter” scenario

SAMPLE SUBSTANTIAL DAMAGE DETERMINATION LETTER – Cumulative Damage

DATE

OWNER
OWNER'S MAILING ADDRESS
CITY, ST, ZIP CODE

RE: Substantial Damage Determination - ADDRESS

Dear Owner,

Following the recent flooding on (insert date), a damage assessment was completed for the home at the property referenced above. This is part of our floodplain management responsibilities and is required for all structures in the regulatory floodplain to maintain the availability of federal flood insurance and disaster assistance in our community. The following information relates to the address referenced above:

Community Number:	170XXX
Flood Zone:	Zone AE
Base Flood Elevation:	417.5
Estimated First Floor Elevation	414.0
Estimated Flood depth on First Floor	3.5 feet

Fair Market Value of Structure:	\$81,226 (based on the County Assessor's assessed value)
Flood Damage Estimate: April 2013	<u>\$52,105</u>

Percent Damaged:	64.2% (50% or more is Substantially Damaged)
Ordinance Requirement:	Elevation, Demolition/Removal, or Relocation of Home

The home is determined to be **Substantially Damaged** due to flooding and the home must be brought into compliance with the (insert name of community's floodplain regulations or section of code) prior to fully repairing the damages or making other improvements. Compliance options for a residential structure are:

- Elevation of the home on posts or an enclosed storage area with flood openings
- Demolition of the home
- Relocation out of the floodplain

Minimal, temporary repairs may be permitted, and a Temporary Occupancy Certificate issued while full compliance is achieved. **A Building Permit and a Temporary Occupancy Certificate must be issued before the home is reoccupied.** Compliance must be completed within two years of receipt of this letter.

If the home will be elevated, Building Permits, inspections, and an Elevation Certificate will be required prior to the issuance of a final *Certificate of Occupancy*. Please contact this office as soon as possible to make an appointment with me to discuss your upcoming project.

If you have flood insurance ask your claims adjuster about filing an Increased Cost of Compliance Claim for financial assistance with cost of complying with this requirement.

If you have any questions, please call or email me at _____.

Next Steps

You have completed your SD determinations, issued your SD determination letters and have worked through any appeals that may have come up. What's next?

- All work, repairs, and development in the SFHA **MUST** be permitted
- Follow through with your normal floodplain permitting process, keeping a close eye on any changes that might affect the SD Determination (Higher quality building materials, alteration from original construction plan)
 - Does your Community have a Cumulative Improvement/damage requirement ?
- Continue to monitor for unpermitted work while in the SFHA

FLOOD PLAIN DEVELOPMENT APPLICATION/PERMIT			
Application # _____	Date _____		
TO THE ADMINISTRATOR: The undersigned hereby makes application for a Permit to develop in a flood plain. The work to be performed, including flood protection works, is as described below and in attachments hereto. The undersigned agrees that all such work shall be done in accordance with the requirements of the City of Dubuque Flood Plain Management Ordinance and with all other applicable county/city ordinances and the laws and regulations of the State of Iowa.			
_____ <i>(Owner or Agent)</i>	_____ <i>(Date)</i>	_____ <i>(Builder)</i>	_____ <i>(Date)</i>
_____ <i>(Address)</i>	_____ <i>(Address)</i>		
Telephone # _____	Telephone# _____		
1. Legal Description: _____ Street Address: _____			
2. Type of Development Filling _____ Grading _____ Excavation _____ Routine Maintenance _____ Minor Improvement _____ Substantial Improvement _____ New Construction _____			
3. Description of Development _____			
4. Premises: Area of Site: _____ sq. ft./acres Estimated cost: \$ _____ Principal Use: _____ Accessory Uses (Storage, parking, etc.) _____			
5. Addition/modification to non-conforming use? Yes _____ No _____ Assessed value of structure \$ _____			
6. Is property located in a designated Floodway (FW District)? Yes _____ No _____			
IF ANSWERED YES, CERTIFICATION MUST BE PROVIDED PRIOR TO THE ISSUANCE OF A PERMIT TO DEVELOP, THAT THE PROPOSED DEVELOPMENT WILL RESULT IN NO INCREASE IN THE 100 YEAR (BASE) FLOOD ELEVATION.			
7. Property located in a designated Floodway Fringe (FF) or General Flood Plain (FP)? Yes ___ No ___ If yes, indicate which one: _____			

Next Steps –Temporary Occupancy Permits

- For buildings, especially homes, that have reached substantial damage level
- Allow minimal repairs for life safety so home can be occupied
- Allows time for mitigation –design of an elevation or a grant for acquisition
- Set timeline when Temporary Occupancy will expire (6 years for ICC but don't wait that long, can extend if delayed by a grant)
- State template available



TEMPLATE

- This is a template for your use. Please edit anything highlighted in red, inserting local details. The text may be changed to fit your community needs.
- This has been developed to assist with the enforcement of the substantial damage provisions of your floodplain regulations.
- Contact IDNR staff for a Word Version of this document.
- This allows for temporary occupancy, but COMPLIANCE IS STILL REQUIRED IF SUBSTANTIALLY DAMAGED.

**DAMAGE REPAIRS to SUBSTANTIALLY DAMAGED HOME IN THE FLOODPLAIN
and
TEMPORARY CERTIFICATE of OCCUPANCY APPLICATION**

INSTRUCTIONS:

After a residential building in the mapped or regulated floodplain is substantially damaged the building must be mitigated. **Mitigation means the residential building must be brought into compliance with the floodplain regulations either by being elevated, demolished, or moved out of the mapped floodplain.** Some communities may also be working on a grant to acquire flooded homes. So, until the mitigation method is resolved, a building permit can be issued for minimal repairs to the building to allow the building to be occupied under a Temporary Certificate of Occupancy (TCO). **The allowed minimal repairs are provided on page 3 of this application.**

A building permit for the minimal repairs must be issued and the **Building Official** must complete an inspection to determine if the building or portions of the building can be occupied safely. **A building shall not be occupied, or furniture brought back into the building until the TCO has been issued.**

The Building Official shall set a time period during which the TCO is valid. This time period shall be of reasonable length to complete all the outstanding work practically and without undue hardship but should **not extend beyond four years from the date of the substantial damage event.**

Once work has been completed under the building permit:

- Complete the TCO application on page 2 and submit to _____.
- Call _____ to request a final inspection.

A TCO will not be issued where correction items relate to life safety requirements or substantial completion have not been completed. Complete these corrections and/or outstanding work items and schedule a re-inspection. Examples of life safety items include handrails or guard rails not installed or shower mixing valve not calibrated to proper temperature. Examples of substantial completion items include toilet or kitchen sink not installed.

Call or email _____ if you have any questions.

TEMPORARY CERTIFICATE of OCCUPANCY APPLICATION

DAMAGE REPAIRS to SUBSTANTIALLY DAMAGED HOME IN THE FLOODPLAIN

Jobsite Address: _____

All Related Building Permit Numbers: _____

Applicant Information Property

Owner(s): _____

Mailing Address: _____

Phone: _____

Alt. Phone: _____

E-Mail: _____

Occupant Information (if different from Owner)

Name(s): _____

Mailing Address: _____

Phone: _____

Alt. Phone: _____

E-Mail: _____

Describe area of occupancy if partial occupancy is being requested (Example kitchen, living room, basement, bathroom, and one first floor bedroom.)

As the owner of the above referenced property, I am requesting temporary approval to occupy the premises (home) before the final flood mitigation of the building has been completed. If a buyout of the property is being pursued, only the limited property repairs listed on page 3 may be completed. Otherwise, the TCO will be revoked, and the home must be vacated immediately, or the owner will be subject to citation and fines and the utilities may be disconnected. **(Insert a reference to your local building code requirements for occupancy permits and penalties for violations.)**

Signature: _____

Date: _____

TEMPORARY OCCUPANCY PERMIT

DAMAGE REPAIRS to SUBSTANTIALLY DAMAGED HOME

EXTERIOR REPAIRS

- Work necessary to provide a potable water supply – this may include well decontamination if it's the only source of potable water.
- Securing broken windows and repair or replacement of functioning exterior and/ or interior door, as necessary.
- Taking temporary actions to weatherproof the home and prevent water intrusion; repairs could be temporary patches to roof or siding.
- Repairing damaged front stairs or porches to allow safe entrance and exit.

INTERIOR REPAIRS

- Work necessary to provide essential electric power supply, HVAC, and hot water.
- Work necessary to restore natural gas supply if required for HVAC, hot water, and/or food preparation.
- Removal of disaster-related debris within the home to a curbside location to ensure safety in entering, assessing, and performing eligible work within the home.
- Removing flood-damaged water-absorbing flooring material including carpet, carpet padding, vinyl and other floor covering materials
- **Minor interior and/or exterior work to provide safe access to the home and ensure a safe living environment.**
- Drywall and insulation replacement for the purpose of safely covering any exposed electrical work or to ensure the home is properly insulated.
- Work necessary to ensure one useable bathroom with vanity cabinet and countertop, sink and faucet, toilet (with tank), tub or shower, drywall around bathroom for privacy.
- Work necessary to ensure functional kitchen facilities with minimal base cabinets, countertops, sink and faucet to include minimal cooking and refrigeration appliances necessary to shelter in place (not to exceed \$500)
- Work necessary to ensure safe and adequate sleeping accommodations for all household members.
- Replacing/installing smoke and carbon monoxide detectors
- Items and work necessary to ensure safe shelter and accessibility for individuals with access and functional needs.

SAMPLE RIGHT OF ENTRY PERMISSION FORM – REVIEW BY COMMUNITY’S ATTORNEY REQUIRED

Property Owner’s Right of Entry Certification and Release

A floodplain permit is required for all construction activity in the Special Flood Hazard Area or that area inundated by the base flood, as designated on the Flood Insurance Rate Maps (FIRMs). These SFHAs are designated as A, AE, A1-A30, AH, or AO Zones on the FIRMs. Construction activity includes repairs due to damages caused by floods and fires or additions/improvements to residential and non-residential structures.

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

I, the undersigned, do hereby grant (insert 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 property to accomplish substantial damage/improvement determinations.

In consideration of the substantial damage assessment conferred on me by the (insert community’s name), in said substantial damage/improvement determinations, I, the undersigned, do hereby release and forever discharge the (insert 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 (Community’s Ordinance or reference to Section of Code).

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.

Property Owner’s Signature

Property Owner’s Signature

Property Owner’s Printed Name

Property Owner’s Printed Name

Date

Date

IN WITNESS WHEREOF, I have hereunder set my hand this ____ day of _____.

Witness Signature

Witness Signature

Witness Printed Name

Witness Printed Name



Questions?



Marilyn Sucoe, P.E., CFM

Illinois Dept. of Natural Resources/Office of Water Resources

Marilyn.Sucoe@Illinois.gov

847-608-3181

Dawn Cosentino, P.E., CFM

Illinois State Water Survey

IAFSM Floodplain Management Committee Chair

RAFT Contact

dawncos@illinois.edu



IAFSM

*Illinois Association for
Floodplain and Stormwater Management*