

# CHAPTER 2. VILLAGE OF ALSIP ANNEX

## 2.1 HAZARD MITIGATION PLAN POINT OF CONTACT

### Primary Point of Contact

Thomas Styczynski, Fire Chief  
12600 S Pulaski Rd  
Alsip, Il 60803  
Telephone: 708-385-6902 x 235  
Email Address: tstyczynski@villageofalsip.org

### Alternate Point of Contact

Robert Ricker, Deputy Chief  
12600 S Pulaski Rd  
Alsip, Il 60803  
Telephone: 708-385-6902 x 236  
Email Address: rricker@villageofalsip.org

## 2.2 JURISDICTION PROFILE

The following is a summary of key information about the jurisdiction and its history:

- **Date of Incorporation:** 1927
- **Current Population:** 19,725 as of 2010 census bureau
- **Population Growth:** The Village of Alsip has experienced a relative flat rate of population growth since the mid-1980s. This is due in part by being landlocked. There is very little property to build upon especially in the residential areas.
- **Location and Description:** The Village of Alsip is located in the south suburbs of the City of Chicago. The village is approximately 20 miles from Downtown Chicago. Alsip is also located approximately 15 miles from the border of the State of Indiana. Alsip is located in the County of Cook and covers an approximate area of 6.79 square miles. The Illinois Tollway (I-294) passes through the village as well as the Calumet Sag Channel which is used for barge traffic to travel from the Mississippi River to Lake Michigan. Alsip is about 60% residential and 40% commercial/ industrial.
- **Brief History:** Alsip was settled in the 1830s by German and Dutch farmers. The village is named after Frank Alsip, the owner of a brickyard that opened there in 1885. The village began to grow after the Tri-State Tollway was built there in 1959.
- **Climate:** The climate in Alsip is classified as humid continental, with all four seasons distinctly represented: wet springs; hot/often humid summers; pleasant autumns; and cold winters. The average rainfall is 35 inches, and the average precipitation days are 118. Annual precipitation is average reaching its lowest points in the months of January and February and peaks in the months of May and June.
- **Governing Body Format:** The Village of Alsip is governed by the village president and a board of six trustees. This body will assume responsibility for adoption and implementation of this plan. Within the Village of Alsip is the Building Dept. Clerk's Office, Finance Department, Fire Department, Police Department, Public Works, and the Water Department.
- **Development Trends:** There has not been a high rate of development in over a decade, since most of the land has been used up. The only development that the village has seen is some old buildings that have been demolished and replaced by newer, more modern specific buildings.

## 2.3 CAPABILITY ASSESSMENT

The assessment of the jurisdiction’s legal and regulatory capabilities is presented in Table 2-1. The assessment of the jurisdiction’s fiscal capabilities is presented in Table 2-2. The assessment of the jurisdiction’s administrative and technical capabilities is presented in Table 2-3. Information on the community’s National Flood Insurance Program (NFIP) compliance is presented in Table 2-4. Classifications under various community mitigation programs are presented in Table 2-5.

<b>TABLE 2-1. LEGAL AND REGULATORY CAPABILITY</b>					
	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
<b>Codes, Ordinances &amp; Requirements</b>					
Building Code	Yes	No	No	Yes	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state Building Code  Ord. #2007-10-4 10/1/2007
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code.  90-11-152-1 Unknown date
Subdivisions	Yes	No	No	No	Ord. #163 65 ILCS 5/11-12-4
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA.
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	No	No	No	No	
Site Plan Review	No	No	No	No	
Public Health and Safety	No	No	Yes	Yes	Cook County Board of Health.
Environmental Protection	No	No	No	No	

**TABLE 2-1.  
LEGAL AND REGULATORY CAPABILITY**

	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
<b>Planning Documents</b>					
General or Comprehensive Plan	No	No	No	No	
	<i>Is the plan equipped to provide linkage to this mitigation plan?</i>				N/A
Floodplain or Basin Plan	N/A	No	No	No	
Stormwater Plan	No	No	Yes	No	Regional stormwater impacts are managed by MWRD. The Village lies within the Calumet-Sag Channel watershed planning area of MWRD's comprehensive Stormwater Master Planning Program
Capital Improvement Plan	No	No	No	No	
	<i>What types of capital facilities does the plan address?</i>				N/A
	<i>How often is the plan revised/updated?</i>				N/A
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	No	No	Yes	Yes	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives offered through the Cook County 6b program.
Shoreline Management Plan	No	No	No	No	
<b>Response/Recovery Planning</b>					
Comprehensive Emergency Management Plan	No	No	Yes	Yes	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County DHSEM
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	No	No	Yes	No	Cook County DHSEM
Public Health Plans	Yes	No	Yes	No	Cook County DPH

<b>TABLE 2-2. FISCAL CAPABILITY</b>	
<b>Financial Resources</b>	<b>Accessible or Eligible to Use?</b>
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes

<b>TABLE 2-3. ADMINISTRATIVE AND TECHNICAL CAPABILITY</b>		
<b>Staff/Personnel Resources</b>	<b>Available?</b>	<b>Department/Agency/Position</b>
Planners or engineers with knowledge of land development and land management practices	Yes	Robinson Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Robinson Engineering
Planners or engineers with an understanding of natural hazards	Yes	Robinson Engineering
Staff with training in benefit/cost analysis	Yes	Finance Director
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Cook County DHSEM
Grant writers	No	

<b>TABLE 2-4. NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE</b>	
What department is responsible for floodplain management in your jurisdiction?	Building
Who is your jurisdiction’s floodplain administrator? (department/position)	Building Commissioner by ordinance
What is the date of adoption of your flood damage prevention ordinance?	7/21/2008
When was the most recent Community Assistance Visit or Community Assistance Contact?	07/27/2006
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	According to IDNR, the Village does have potential violations.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	Yes, assistance in dealing with the potential violations would be most appreciated.
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	Not at this time.

<b>TABLE 2-5. COMMUNITY CLASSIFICATIONS</b>			
	Participating?	Classification	Date Classified
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	3	2006
StormReady	Yes	Gold (countywide)	2014
Tree City USA	No	N/A	N/A

## 2.4 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 2-6 lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: N/A

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Severe Weather	N/A	Nov. 2013	Information not available
Severe heat	N/A	July 2012	Information not available
Severe Weather	N/A	Aug. 2011	Information not available
Severe Winter weather	DR-1960	Feb. 2011	Information not available
Severe storm/ flooding	N/A	June 2011	Information not available
Flooding	N/A	Aug 2010	Information not available

## 2.5 HAZARD RISK RANKING

Table 2-7 presents the ranking of the hazards of concern.

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Severe Weather	54
2	Severe Winter Weather	54
3	Tornado	51
4	Earthquake	16
5	Flood	15
6	Drought	2
7	Dam Failure	0

## 2.6 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 2-8 lists the actions that make up the jurisdiction’s hazard mitigation plan. Table 2-9 identifies the priority for each action. Table 2-10 summarizes the mitigation actions by hazard of concern and the six mitigation types.

**TABLE 2-8.  
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to New or Existing Assets	Hazards Mitigated	Objectives Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline <sup>a</sup>
<b>Action A1.1</b> —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.						
Existing	All	7, 13	Village of Alsip	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
<b>Action A1.2</b> —Continue to support the countywide actions identified in this plan.						
New and existing	All	All	Village of Alsip	Low	General Fund	Short- and long-term
<b>Action A1.3</b> —Actively participate in the plan maintenance strategy identified in this plan.						
New and existing	All	3, 4, 6	DHSEM, Village of Alsip	Low	General Fund	Short-term
<b>Action A1.4</b> —Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.						
New and existing	All	3, 4, 5, 6, 7, 9, 10,11, 13	Village of Alsip	Low	General Fund	Long-term
<b>Action A1.5</b> —Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.						
New and existing	Flooding	4, 6, 9	Village of Alsip	Low	General Fund	Short-term and ongoing
<b>Action A1.6</b> —Where feasible, implement a program to record high water marks following high-water events.						
New and existing	Flooding, Severe Weather	3, 6, 9	Village of Alsip	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
<b>Action A1.7</b> —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
New and existing	All	3, 4, 6, 10, 13	Robinson Engineering	Low	General Fund	Short-term
<b>Action A1.8</b> —Reinforce lifting stations.						
New and existing	Earthquake, Flood, Severe Weather	1,2,7	Village of Alsip	\$375,000, High	Bonds, FEMA Grants	Short-term
a. Ongoing indicates continuation of an action that is already in place. Short-term indicates implementation within five years. Long-term indicates implementation after five years.						

**TABLE 2-9.  
MITIGATION STRATEGY PRIORITY SCHEDULE**

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority <sup>a</sup>
1	2	High	High	Yes	Yes	No	Medium
2	13	Medium	Low	Yes	No	Yes	High
3	3	Medium	Low	Yes	Yes	Yes	High
4	9	Medium	Low	Yes	No	Yes	Medium
5	3	Medium	Low	Yes	No	Yes	High
6	3	Medium	Medium	Yes	Yes	No	Medium
7	5	Medium	Low	Yes	No	Yes	High
8	3	High	High	Yes	Yes	No	Medium

a. See Chapter 1 for explanation of priorities.

**TABLE 2-10.  
ANALYSIS OF MITIGATION ACTIONS**

Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	N/A	N/A	N/A	N/A	N/A	N/A
Drought	2, 3, 7	1	2, 3	N/A	2	N/A
Earthquake	2, 3, 7	1, 8	2, 3	N/A	2	N/A
Flood	2, 3, 4, 5, 6, 7	1, 4, 5, 8	2, 3, 4, 5	4, 5	2, 4, 5	N/A
Severe Weather	2, 3, 4, 6, 7	1, 8	2, 3, 4	4	2, 4	N/A
Severe Winter Weather	2, 3, 4, 7	1	2, 3, 4	4	2, 4	N/A
Tornado	2, 3, 4, 7	1	2, 3, 4	N/A	2, 4	N/A

a. See Chapter 1 for explanation of mitigation types.

## 2.7 FUTURE NEEDS TO BETTER UNDERSTAND RISK/ VULNERABILITY

No needs have been identified at this time.

## 2.8 ADDITIONAL COMMENTS

No additional comments at this time.



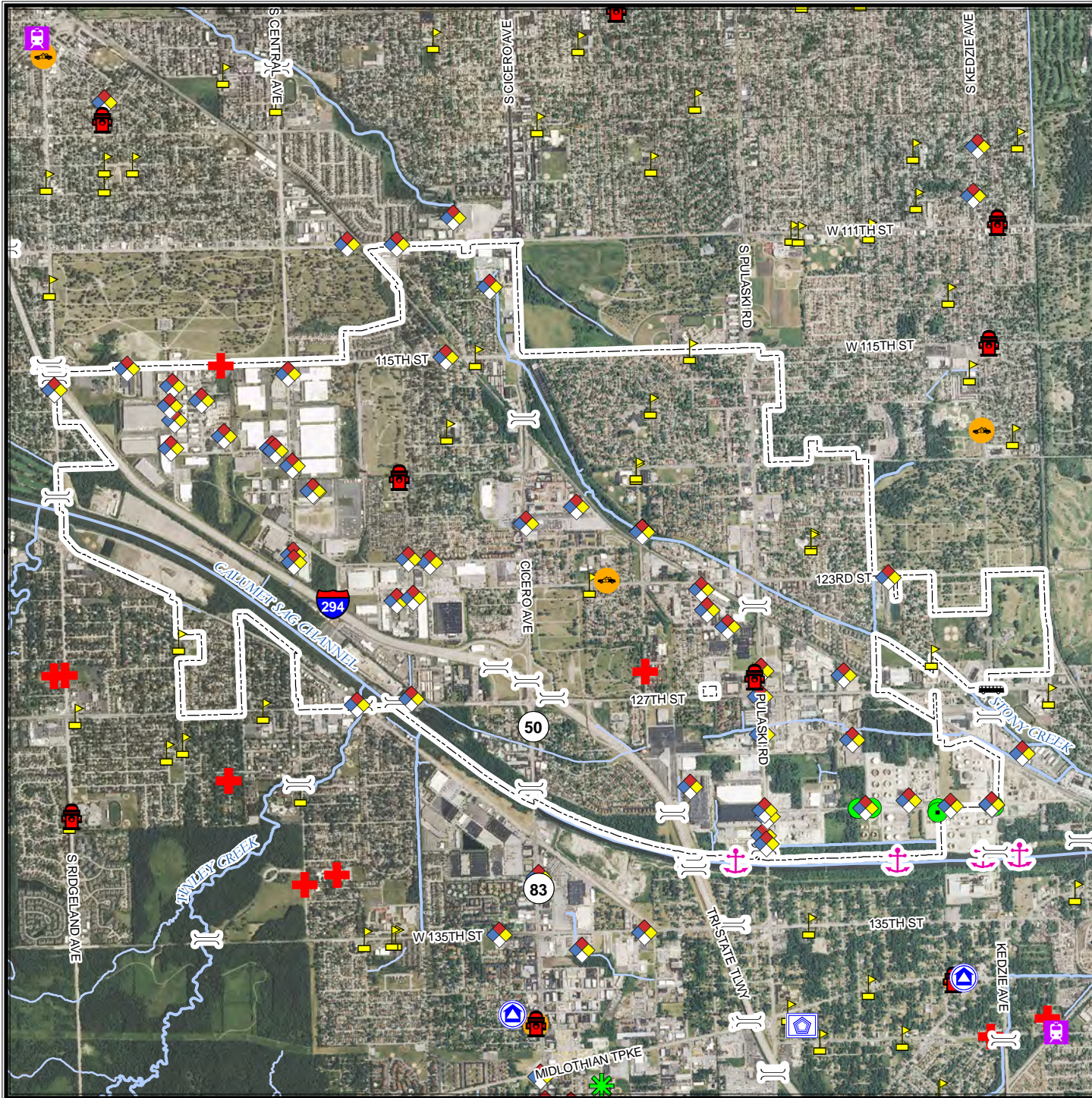
## **HAZUS-MH RISK ASSESSMENT RESULTS FOR ALSIP**

<b>ALSIP EXISTING CONDITIONS</b>	
2010 Population.....	19,277
Total Assessed Value of Structures and Contents .....	\$4,094,137,396
Area in 100-Year Floodplain .....	178.37 acres
Area in 500-Year Floodplain .....	184.57 acres
Number of Critical Facilities .....	88

<b>HAZARD EXPOSURE IN ALSIP</b>						
	Number Exposed		Value Exposed to Hazard			% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents	Total	
<b>Dam Failure</b>						
Buffalo Creek	0	0	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	<b>\$0</b>	0.00%
Touhy	0	0	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	<b>\$0</b>	0.00%
<b>Flood</b>						
100-Year	16	5	\$311,441	\$373,345	<b>\$684,786</b>	0.02%
500-Year	23	7	\$678,511	\$556,880	<b>\$1,235,391</b>	0.03%
<b>Tornado</b>						
100-Year	—	—	\$539,197,319	\$435,369,012	<b>\$974,566,331</b>	23.80%
500-Year	—	—	\$917,502,747	\$743,123,320	<b>\$1,660,626,067</b>	40.56%




















<b>ESTIMATED PROPERTY DAMAGE VALUES IN ALSIP</b>				
	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
<b>Dam Failure</b>				
Buffalo Creek	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #2	\$0	\$0	<b>\$0</b>	0.00%
Touhy	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #3	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #4	\$0	\$0	<b>\$0</b>	0.00%
<b>Earthquake</b>				
1909 Historical Event	\$42,889,983	\$14,695,436	<b>\$57,585,419</b>	1.41%
<b>Flood</b>				
10-Year	\$0	\$0	<b>\$0</b>	0.00%
100-Year	\$0	\$0	<b>\$0</b>	0.00%
500-Year	\$6,929	\$4,170	<b>\$11,099</b>	0.00%
<b>Tornado</b>				
100-Year	\$53,919,732	\$43,536,901	<b>\$97,456,633</b>	2.38%
500-Year	\$133,955,401	\$108,496,005	<b>\$242,451,406</b>	5.92%

## **HAZARD MAPPING FOR ALSIP**

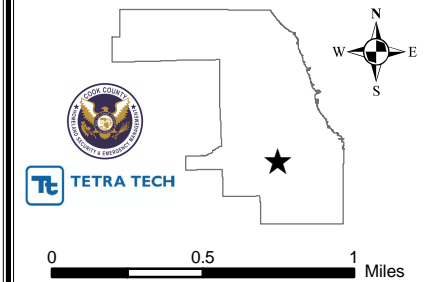


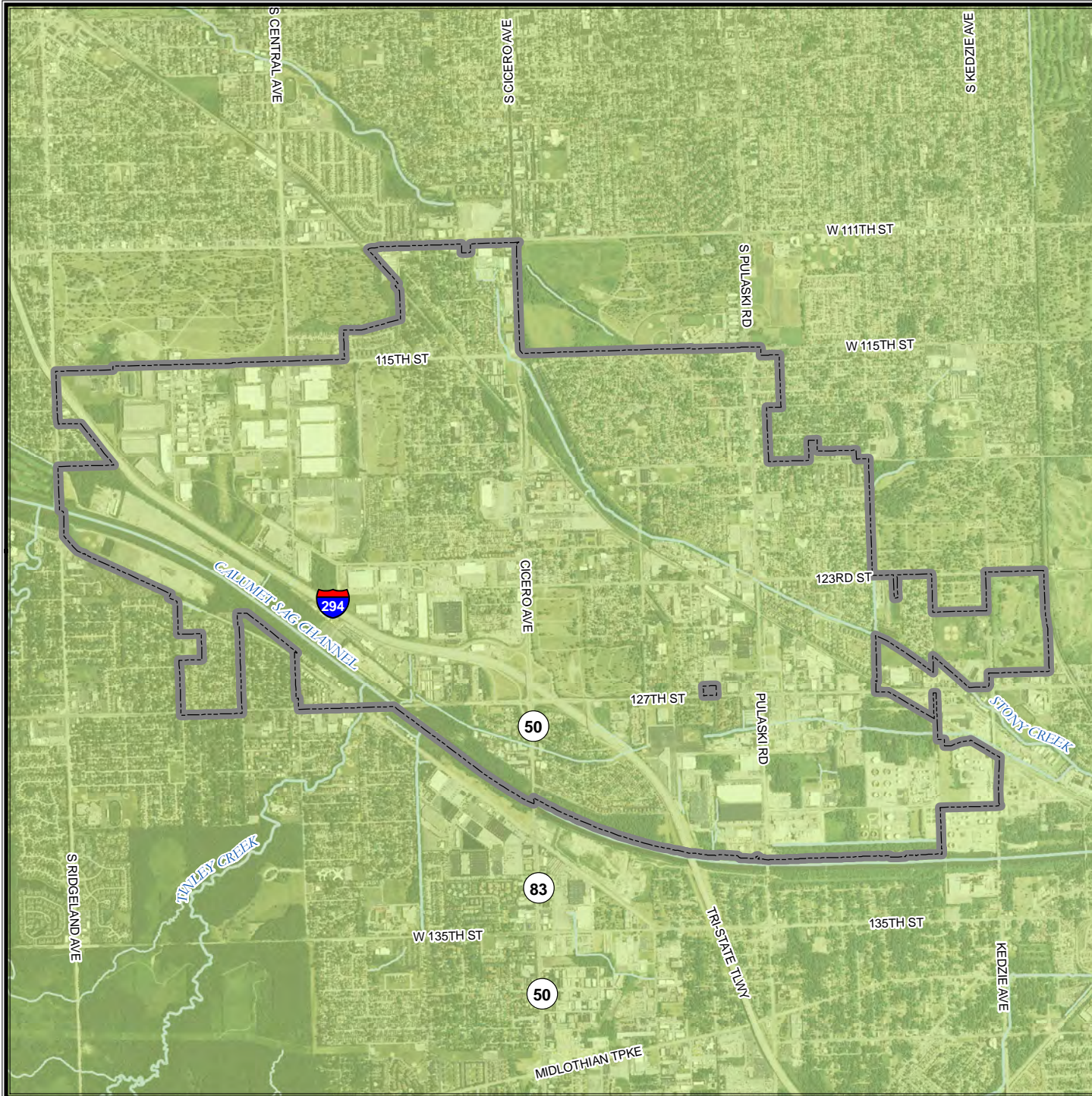
# VILLAGE OF ALSIP

## Critical Facilities

-  Airport Facility
-  Bus Facility
-  Dams
-  Emergency Operations Center
-  Fire Station Facility
-  Hazardous Materials
-  Highway Bridge
-  Light Rail Bridge
-  Light Rail Facility
-  Medical Care Facility
-  Military
-  Oil Facility
-  Police Station Facility
-  Port Facility
-  Potable Water Facility
-  Rail Facility
-  Railway Bridge
-  School Facility
-  Other Facility

Base Map Data Sources:  
Cook County, U.S. Geological Survey





# VILLAGE OF ALSIP

## Illinois Historical 1909 Earthquake

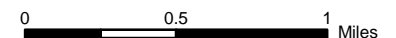
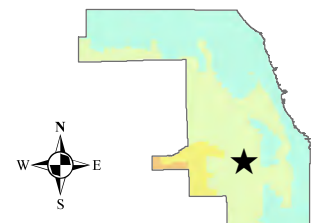
### Modified Mercalli Intensity

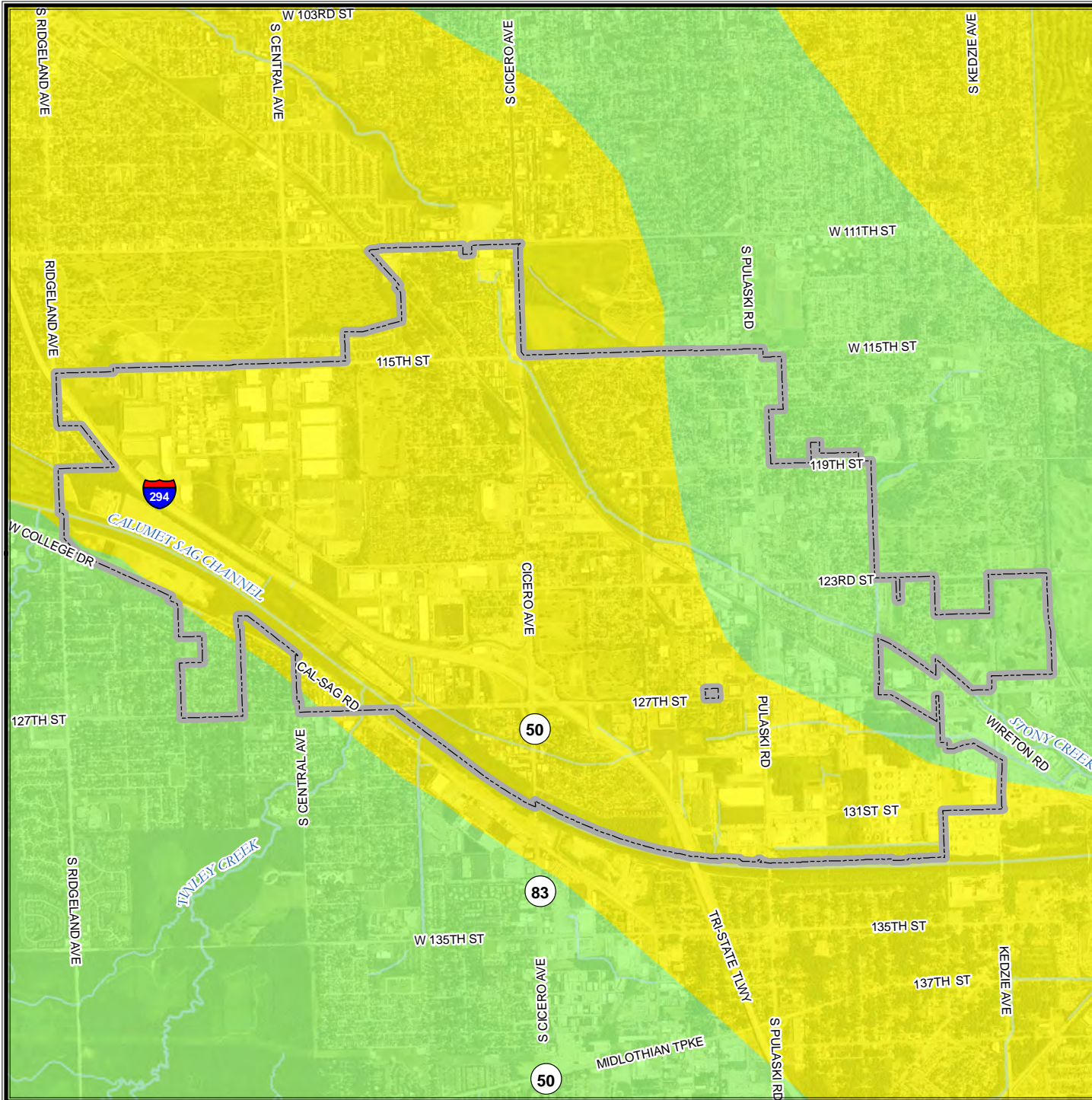
- I (Not Felt)
- II-III (Weak)
- IV (Light)
- V (Moderate)
- VI (Strong)
- VII (Very Strong)
- VIII (Severe)
- IX (Violent)
- X+ (Extreme)

Event Date of May 26, 1909. Original magnitude of 5.0; increased magnitude for analysis of 6.0. Depth: 10 km. Epicenter Lat/Long: 41.6N 88.1W

An Epicenter Map is derived from a database of historical earthquakes developed from three sources (Composite Earthquake Catalog, 2002, Earthquake Data Base, 2002, and Earthquake Seismicity Catalog, 1996). The database has been sorted to remove historical earthquakes with magnitudes less than 5.0. The Epicenter Map is based on a historical earthquake epicenter, selected from the database.

Base Map Data Sources:  
Cook County, U.S. Geological Survey





# VILLAGE OF ALSIP

## National Earthquake Hazard Reduction Program (NEHRP) Soil Classification

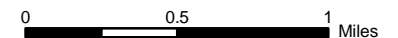
### Site Class

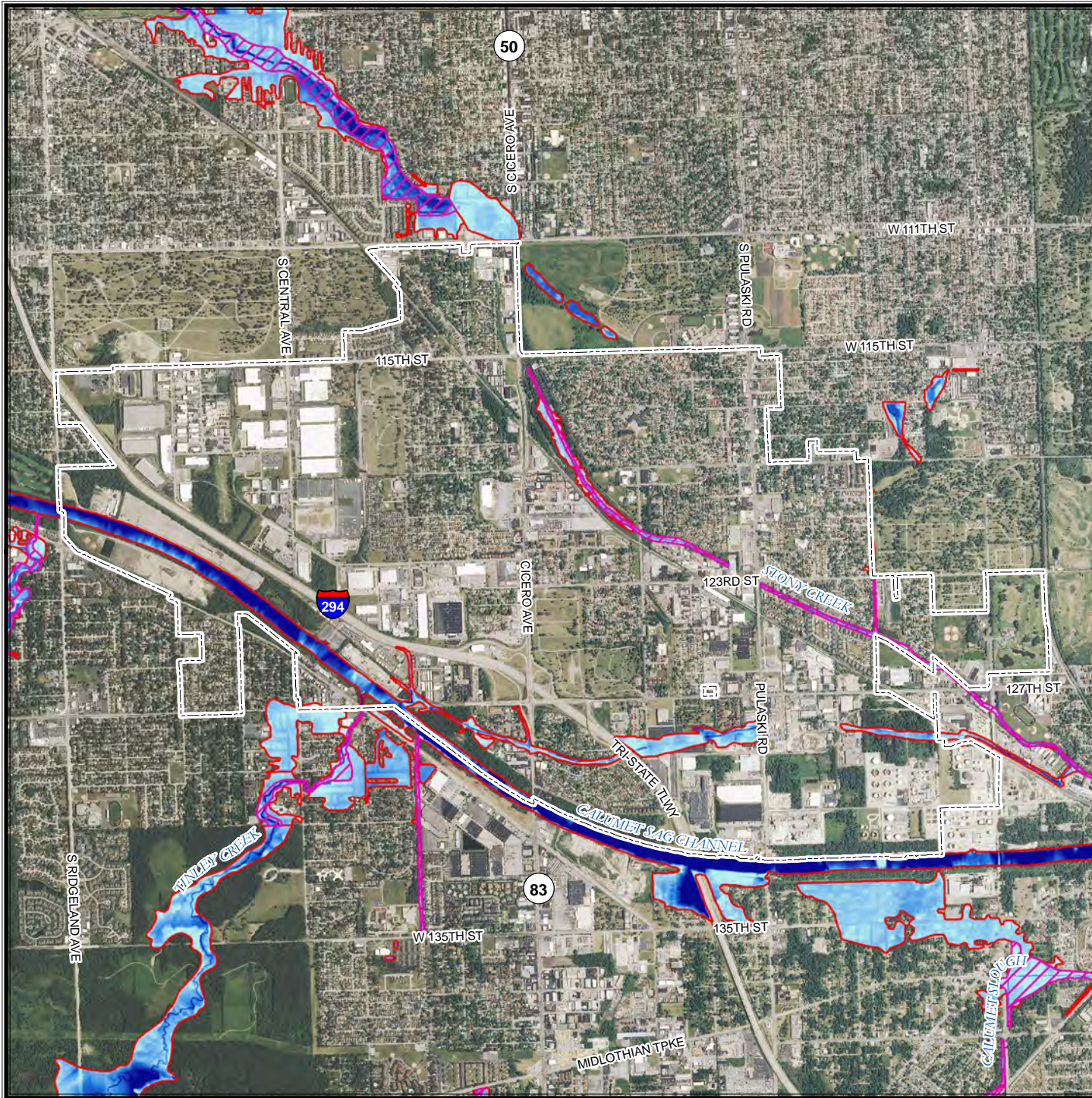
- A - Hard Rock
- B - Rock
- C - Very Dense Soil, Soft Rock
- D - Stiff Soil
- E - Soft Soil
- F - Site-Specific Evaluation

Soil classification data provided by the Illinois State Geological Society.

The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. Central U.S. Earthquake Consortium (CUSEC) State Geologists used the entire column of soil material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

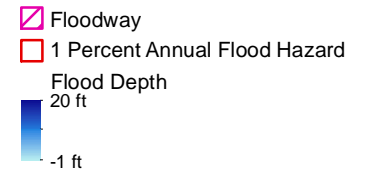
Base Map Data Sources:  
Cook County, U.S. Geological Survey





# VILLAGE OF ALSIP

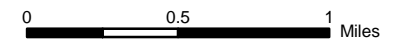
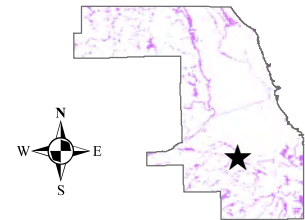
## FEMA DFIRM Flood Hazard Areas

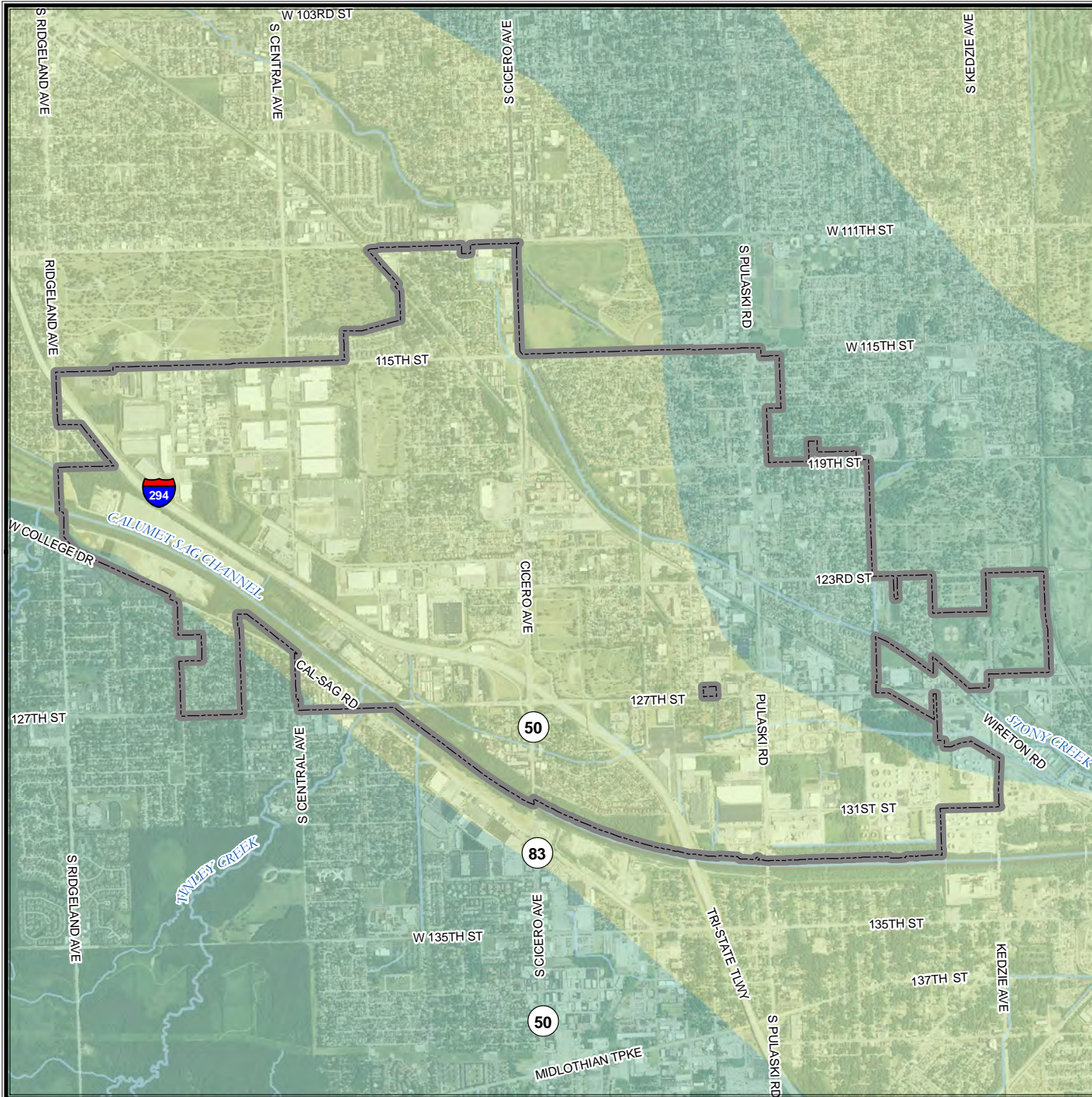


Flood hazard areas as depicted on FEMA Digital Flood Insurance Rate Maps (DFIRM).

The 1 percent annual flood hazard is commonly referred to as the 100 year floodplain.

Base Map Data Sources:  
Cook County, U.S. Geological Survey





# VILLAGE OF ALSIP

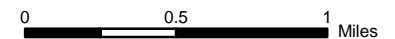
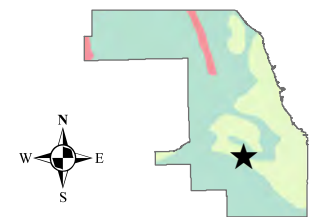
## Liquefaction Susceptibility

Susceptible		Not Susceptible	
High	Moderate to High	Bedrock	Peat
Moderate	Low to Moderate	Water	Ice
Low	Very Low to Low		
Very Low			

Liquefaction data provided by the Illinois State Geological Society. Liquefaction data based on the Youd and Perkins (1978) method.

A liquefaction susceptibility map provides an estimate of the likelihood that soil will liquefy as a result of earthquake shaking. This type of map depicts the relative susceptibility in a range that varies from very low to high. Areas underlain by bedrock or peat are mapped separately as these earth materials are not liquefiable, although peat deposits may be subject to permanent ground deformation caused by earthquake shaking.

Base Map Data Sources:  
Cook County, U.S. Geological Survey







# VILLAGE OF ALSIP

## 100- and 500-Year Tornado Events

- 100-Year Modeled Tornado Event (F4) ■
- 500-Year Modeled Tornado Event (F5) ■

The 100- and 500-year events have been modeled based on fifty-nine years of tornado data for Cook County. The wind speeds, widths, lengths, and direction for each event were developed using existing historical tornado data. The simulated storms and their corresponding losses within this jurisdiction were used to determine the 100- and 500-year economic loss event.

Base Map Data Sources:  
Cook County, U.S. Geological Survey

