

Flood Response Plan



WINDSOR
HEIGHTS
the heart of it all

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2 Introduction

The City of Windsor Heights Flood Response Plan was developed to help protect the community from the dangers of flash flooding. The success of a flood response plan relies on the decisions and actions taken to protect lives and property. Three primary action areas are utilized:

1. Evacuation/Rescue/Relocation
2. Road & Trail Closures
3. Public Information

A thorough and well-thought-out flood response plan is essential to these actions. This document focuses on flood response planning for the City of Windsor Heights.

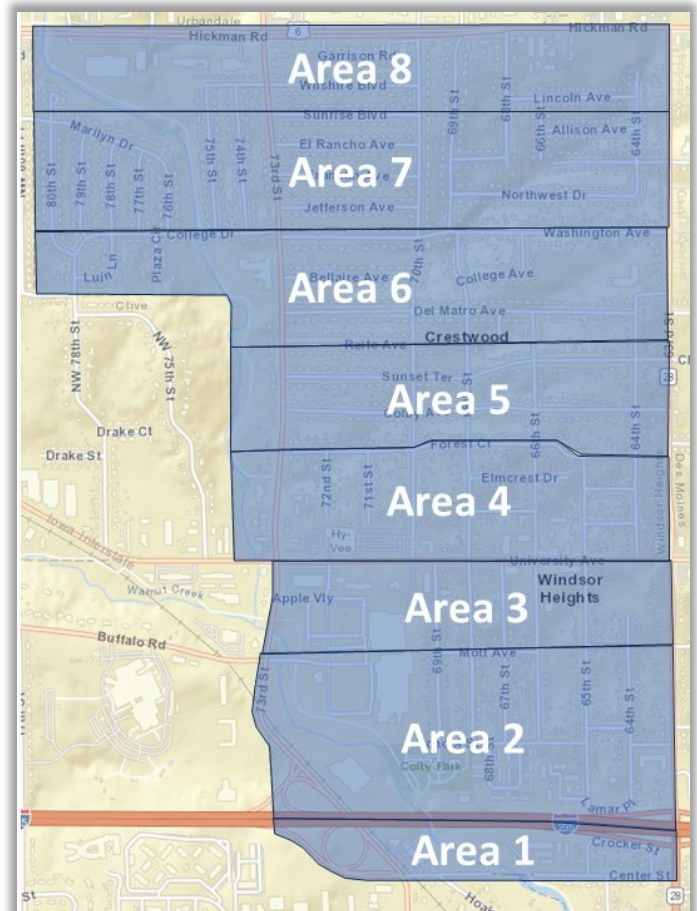
The objectives of this response plan include:

1. Assigning responsibility to individuals for actions that must be taken during a flood emergency and specifying times and places for those actions.
2. Setting forth lines of authority and describing how actions will be coordinated among different agencies or different jurisdictions.
3. Describe how people and property will be protected during a flood.
4. Identify the personnel, equipment, facilities, supplies, and other resources available for assigned duties.

A well-conceived, organized, up-to-date, and comprehensive flood response plan must be developed in advance and must be immediately available to staff.

Eight geographical planning areas are utilized:

- Area 8 – Marilyn Drive to Hickman Road
- Area 7 – College Drive to Marilyn Drive
- Area 6 – Reite Avenue to College Drive
- Area 5 – Forest Court to Reite Avenue
- Area 4 – University Avenue to Forest Court
- Area 3 – Mott Avenue to University Avenue
- Area 2 – I235 to Mott Avenue
- Area 1 – Center Street to I235



3 Annual Plan Updates

Annual Exercise - At least one exercise and evaluation of the Flood Response Plan will be conducted each year. The criterion can be deemed met if the city has experienced an actual flood or threat in the preceding twelve months.

The annual exercise will be documented with an agenda/scenario summary, attendance record, and after-action report.

Exercise Year	Date of Annual Exercise
2024	3/19/24
2025	3/4/25
2026	
2027	
2028	

After-Action Report – The purpose is an annual evaluation of the plan's performance and recommended changes that may be needed, as identified in an after-action report. The City Administrator shall be responsible for ensuring that the various departments/partners complete any necessary changes.

Plan Update – The Fire Chief shall ensure that any necessary changes to the Flood Response Plan identified in the after-action report are completed.

Presentation to City Council – Following the annual exercise, the after-action report and draft plan updates will be presented to the City Council.

Council Approval of Plan Update – Following review of the annual plan updates, the City Council shall adopt the updated Flood Response Plan via Resolution.

Update Year	Date of Resolution Adoption
2024	April 15, 2024
2025	April 7, 2025
2026	
2027	
2028	

4 Leadership & Departmental Phone List

	Name	Cell	Direct
Elected Officials			
Mayor	Mike Jones	515-238-5105	
Mayor Pro-Tem	Susan Skeries	515-250-2206	
Council Member	Lauren Campbell	515-418-0624	
Council Member	Threase Harms	515-975-5299	
Council Member	Joseph Jones	515-419-1151	
Council Member	Michael Libbie	515-570-2220	
Staff			
City Administrator	Adam Plagge	515-343-7424	515-645-6808
City Attorney	Erin Clanton	515-240-9503	515-274-1450
City Clerk/ Communications	Adam Strait	515-419-5903	515-645-6810
Finance	Rachel Swisher (Director)	515-778-6290	515-645-6830
Fire	Jim Mease (Chief)	515-402-1162	515-402-1162
	A-Shift – Lt. Brian Jones	515-418-6618	
	B-Shift – Jeff Price	929-666-3430	
	C-Shift – Kari Davis	515-897-9412	
Police	Pete Roth (Chief)	641-525-0152	515-645-6811
	Chad Norris (Patrol Lt.)	602-369-7556	515-645-6813
	Mike Irlbeck (Support Services Lt.)	515-321-9071	515-645-6814
Public Works	Andy Larson (Director)	515-314-6590	515-645-6825
	Jason Roberts (Supervisor)	641-954-1392	
Water (DMWW)	Kyle Danley	515-971-6488	515-283-8795
Sanitary Sewer	Adam Pasker	515-954-8811	
	Tim Stovie	515-331-6823	

Department	Facility	General	Fax
City Administration	City Administration Building	515-279-3662	515-279-3664
Public Works	Public Works Building	515-645-6825	
Finance	City Administration Building	515-279-3662	
EOC/City Council Chambers	Public Safety Building	515-645-6842	
Police	Public Safety Building	515-277-4453	
Fire	Public Safety Building	515-279-9450	515-279-7760
Westcom Dispatch	West Des Moines Station 19	515-222-3321	515-222-3331
Water	DMWW	515-283-8700	
Sewer	City of Urbandale	515-278-3950	

5 Incident Management System (IMS)

5.1 Radio Communications

Departments will operate on their normal talkgroups. Communications with the EOC are established through department representatives with radios at the EOC.

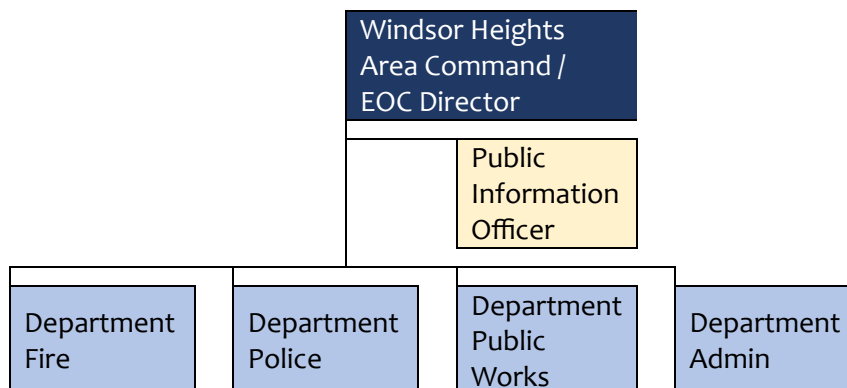
5.2 Emergency Operations Center (EOC)

The Windsor Heights City Council Chamber is designated as the EOC.

Desired minimum EOC staffing includes the City Administrator, Public Works Director, Police Chief, Fire Chief, and City Clerk (or their representatives).

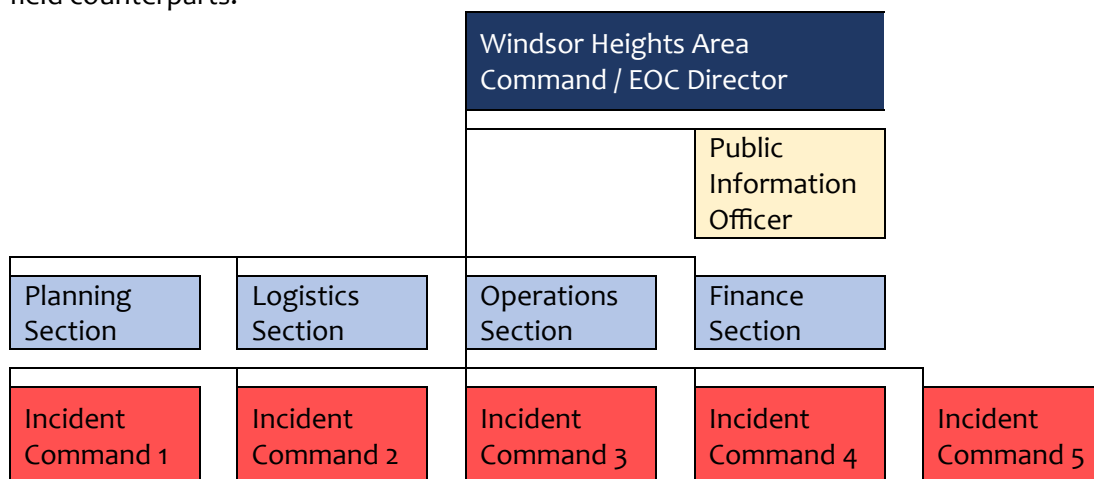
5.3 IMS Initial Flood Response – EOC Organized by Departmental Structure

Description: This EOC format utilizes day-to-day departmental structures and relationships. By operating in the context of everyday relationships, department representatives function in the EOC with minimal preparation or startup time. In this configuration, the City Administrator typically coordinates EOC efforts among departments.



5.4 IMS Modular Flood Response – EOC Organized by Incident Command System Structure

Description: This EOC format configures the EOC using the standard ICS organizational structure. The structure is familiar to many people and aligns with the on-scene incident organization. By operating in the context of modular expansion, the Windsor Heights Area Command/EOC can support various Incident Commands. Certain titles can be modified to create an ICS-like organization that distinguishes EOC functions from their field counterparts.





6 Role of Elected Officials

During a flood, elected officials have specific responsibilities to ensure the safety and well-being of their constituents. Some key responsibilities include:

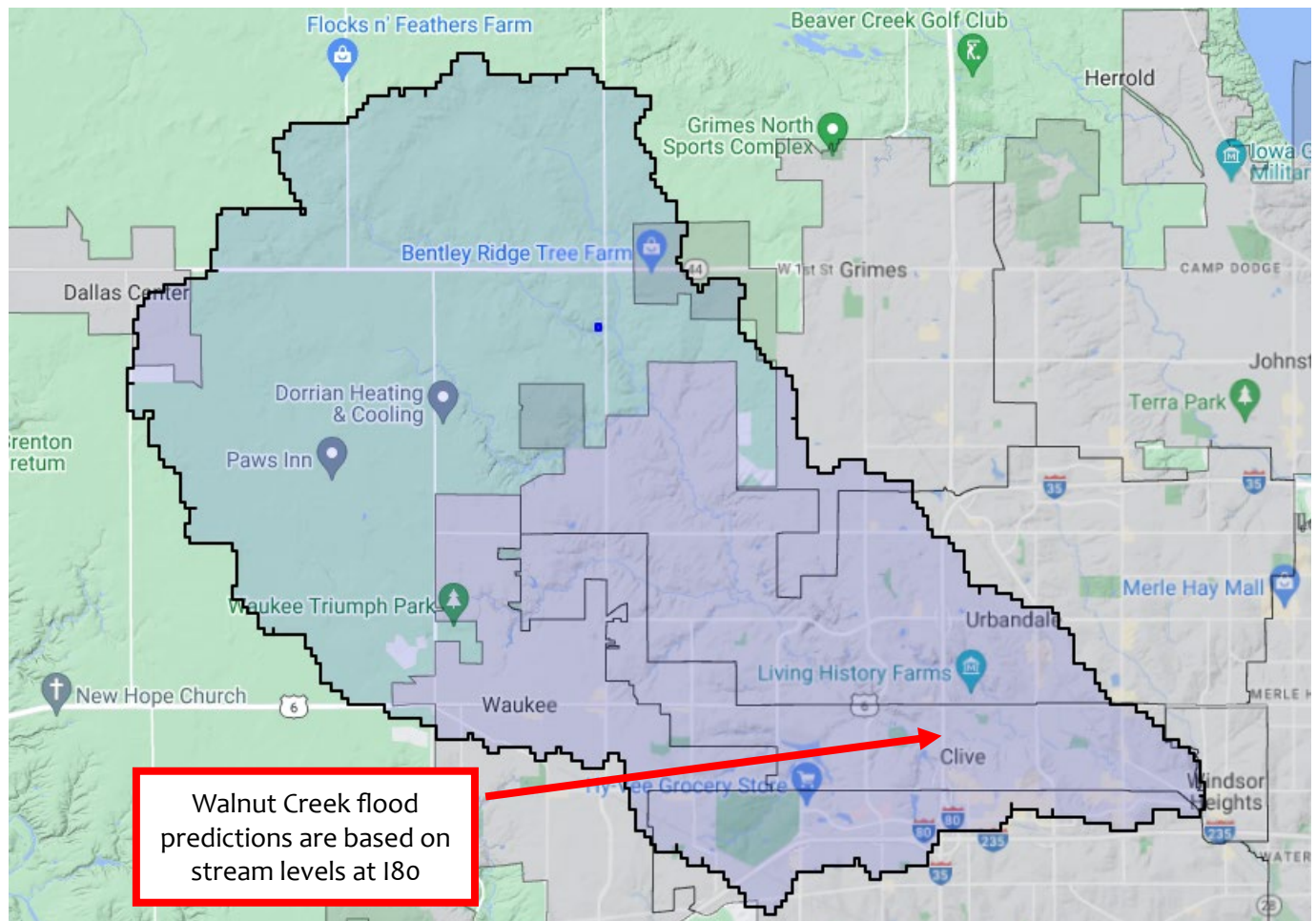
- **Emergency Declarations:** Elected officials may need to issue emergency declarations to empower local authorities and agencies to take swift action. This could involve imposing curfews, restricting movement, or allocating additional resources.
- **Relocation Transportation:** Elected officials are responsible for assisting with relocation transportation. This could include driving transportation vehicles and/or coordinating with Polk County Emergency Management Agency for DART resources.
- **Assistance with Emergency Operations Center Operations:** Elected Officials will assist with EOC needs, such as documenting various actions and/or fielding inquiries from the public.
- **Community Engagement:** Elected officials play a key role in engaging with the community before, during, and after emergencies. They must foster a sense of community resilience, encourage preparedness, and address residents' concerns and feedback.
 - Engagement after a flooding event can have several significant benefits. Keeping citizens informed about recovery efforts, safety protocols, and available resources helps ensure everyone is aware of what to do and where to get help. Engaging with businesses fosters a sense of community and resilience, showing that the city is committed to supporting its residents and local economy. Showing empathy towards citizens' needs can build trust and strengthen the relationship between the local government and the community.
- **Resource Allocation:** Effective resource allocation is essential. Elected officials must coordinate with emergency services to ensure sufficient personnel, equipment, and supplies are available to respond to the flood. This may include deploying rescue teams, providing emergency shelters, and distributing essential items.
- **Coordination with Agencies:** Collaboration with various agencies such as Polk County Emergency Management, Polk County Public Health, and the Metro Waste Authority is vital. Elected officials must coordinate efforts to ensure a unified and effective response to the flood. This may also include having an elected official serve as the City of Windsor Heights representative at the Polk County Emergency Operations Center.
- **Assistance for Affected Communities:** Providing support to communities affected by the flood is essential. Elected officials must ensure that affected residents have access to emergency services, temporary housing, medical care, and other necessary assistance.
- **Advocacy for State and Federal Assistance:** In severe flood situations, elected officials may need to advocate for state and federal assistance. This involves engaging with higher levels of government to secure additional resources and funding to support the local response and recovery efforts.
- **Post-Flood Recovery:** After the floodwaters recede, elected officials play a crucial role in the recovery process. This includes assessing damages, coordinating rebuilding efforts, and ensuring the community receives the necessary support to recover and rebuild.
- **Evaluation and Improvement:** After the emergency, elected officials are responsible for evaluating the response efforts to identify strengths and weaknesses. This evaluation helps in refining and improving the emergency operations plan for future incidents.

7 Situation Monitoring

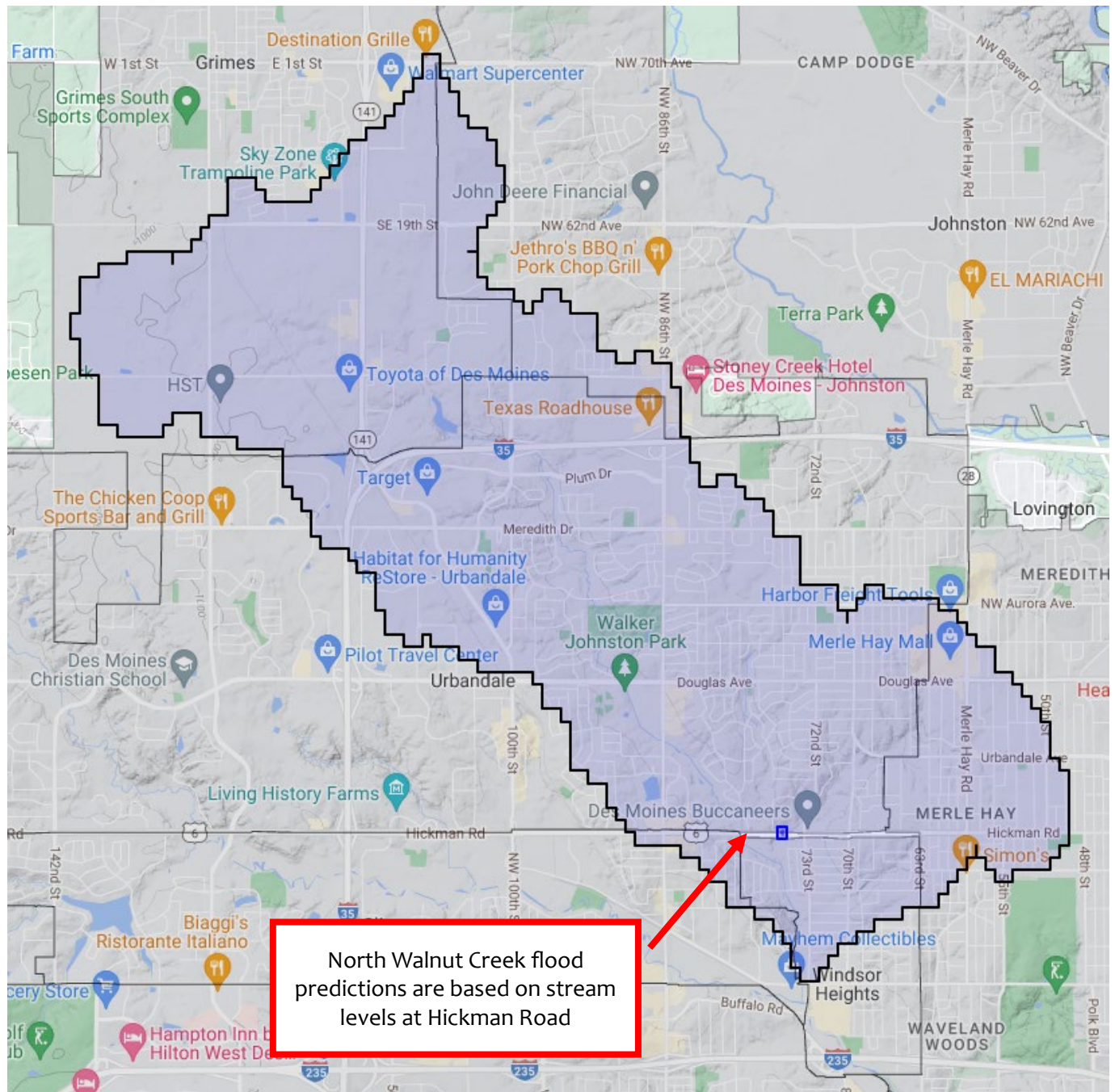
Monitoring of potential flooding situations is coordinated by:

- FLASH Reports from Polk County Emergency Management
- Monitoring briefings, alerts, and communications from the National Weather Service
- Iowa Flood Information System (IFIS)
 - URL: <https://ifis.iowafloodcenter.org/ifis/>
 - Select LAUNCH IFIS
 - Select DATA RESOURCES icon 
 - Select Stream Gauges and Rain Gauges
 - Select WEATHER CONDITIONS icon 
 - Select Rainfall data, as desired
- Contrail/Des Moines Metro ALERT Flood Monitoring System
 - Provides rainfall and stream-level data
 - Restricted access to select staff – URL: <https://contrail.dm.gov.org/>
- NOAA/NWS National Water Prediction Service
 - Provides stream-level data
 - Public access – URL: <https://water.noaa.gov/>

Walnut Creek Watershed Boundary (prior to convergence with North Walnut Creek)



North Walnut Creek Watershed Boundary (prior to convergence with Walnut Creek)



8 Stream Elevation Levels

8.1 Walnut Creek Elevation Levels at I-80

ID	Discharge (cfs) at I-80	Surface Water Elevation Feet Above Sea Level at I-80	Surface Water Elevation Stream Gauge in Feet at I-80	Probability
4T	4,000	860.9	10.8	
5T	5,000	861.5	11.4	
6T	6,000	862.1	12.1	
	6,430	862.3	12.3	1:10 years, (10%)
7T	7,000	862.6	12.6	
8T	8,000	863.1	13.1	
9T	9,000	863.5	13.5	
	9,039	863.6	13.6	1:25 years, (4%)
10T	10,000	863.9	13.9	
12T	12,000	864.6	14.6	1:50 years (2%)
15T	15,000	865.5	15.5	1:100 years (1%)
20T	20,000	866.7	16.9	
	23,760	867.5	17.5	1:500 years (0.2%)
24T	24,000	867.6	18.1	

8.2 North Walnut Creek at Hickman Road

ID	24-Hour Precipitation Indicator	Surface Water Elevation Feet Above Sea Level at Hickman	Surface Water Elevation Stream Gauge in Feet at Hickman	Probability
10%	4.27"	842.95'	9.85'	1:10 years, (10%)
4%	5.15"	843.94'	10.84'	1:25 years, (4%)
2%	5.87"	844.71'	11.61'	1:50 years (2%)
1%	6.61"	845.48'	12.38'	1:100 years (1%)
0.2%	8.06"	846.92'	13.82'	1:500 years (0.2%)

9 Response Levels

9.1 Walnut Creek Response Levels

Response levels are based on National Weather Service (NWS) water crest predictions for Walnut Creek at I80 (Clive). A Flash Flood Warning is issued for Walnut Creek at 9'.

The Pre-Warning Level will be implemented during times of significant rainfall and/or water levels reaching 5' and rising at I80.

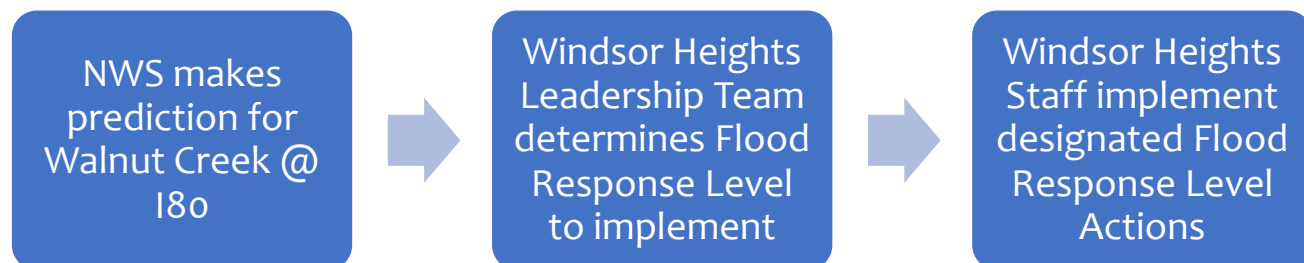
Flood Response Levels 1 through 3 will be implemented based on the NWS crest prediction at I-80.

Walnut Creek flood predictions
are based on stream levels at

I-80

Response Level	NWS I80 Crest Prediction	Inundation Map Levels	Flood Chance Levels
Pre-Warning	>5'		
Flood – Level 1	10.9' thru 12.6'	4T-5T-6T-7T	1:10 _{yr} / 10% chance @ 6T
Flood – Level 2	13.1' thru 13.9'	8T-9T-10T	1:25 _{yr} / 4% chance @ 9T
Flood – Level 3	14.6' thru 18.1'	12T-15T-20T-24T	1:50 _{yr} / 2% chance @ 12T 1:100 _{yr} / 1% chance @ 15T 1:500 _{yr} / 0.2% chance @ 24T

Flood Response Plan Implementation Sequence:



Flood Response Plan Implementation Sequence EXAMPLE:



9.2 North Walnut Creek Response Level

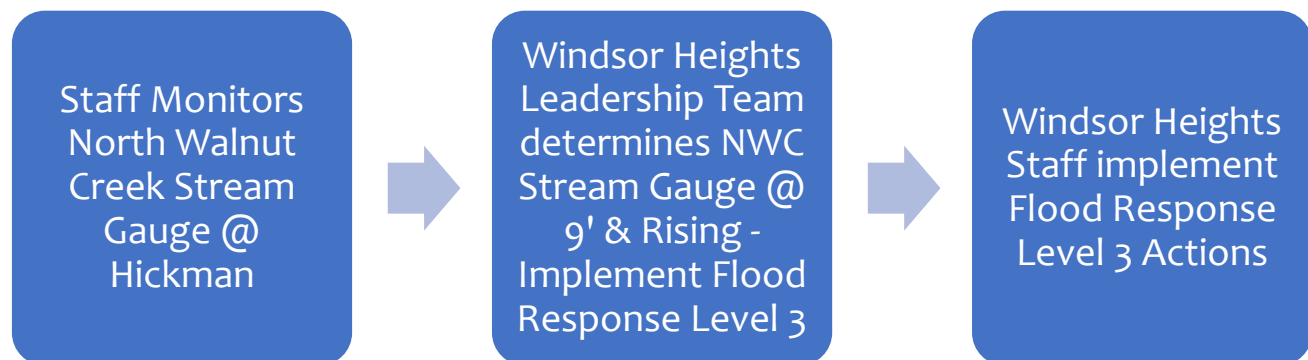
Flash flooding from North Walnut Creek is highly dynamic, and the impacts downstream after Walnut Creek's convergence are not fully understood. Due to the rapid rise and unpredictability of North Walnut Creek, flood response plans will be initiated at Flood – Level 3 when North Walnut Creek is at 9' and rising, as assessed at Hickman Road.

North Walnut Creek flood predictions
are based on stream levels at

Hickman Road

Response Level	North Walnut Creek @ Hickman Road Stream Gauge
Flood – Level 3	9' and rising

Flood Response Plan Implementation Sequence:



10 City Facilities

Before city facilities flood, it's crucial to take preventive measures to minimize damage and ensure the safety of those inside. Actions to consider for specific facilities include:

10.1 Public Works Building [Coordinated by Public Works Assistant Director]

Location: 6800 School Street

For any Walnut Creek >12' (6T) predicted event at I80, or

For any North Walnut Creek >9' and rising event at Hickman Road:

- Immediately call in staff and relocate PW equipment to City Hall and Public Safety or another prescribed location. This action should be done early, given other essential flood response duties will quickly arise for Public Works staff.
- Deploy Salt Shed Flood Gate Barrier System
- Shutoff main disconnect at electrical panel (feed for pavilion, food truck plaza, and park)

For any Walnut Creek >13' (8T) predicted event at I80, or

For any North Walnut Creek >9' and rising event at Hickman Road:

- Elevate and unplug items susceptible to damage.
- Turn off electrical power at the main electrical panel in the mezzanine (SW corner of the building, 2nd floor, interior).
- Turn off natural gas at the meter, located near the SE corner of the building (exterior).
- Turn off water at the main valve, located under the stairs to the West mezzanine (interior).

10.2 Community Event Center [Coordinated by Deputy City Clerk]

Location: 6900 School Street

Note: Facility elevation of 827.3', below the 100-year elevation of 828.9'

For any Walnut Creek >10.9' (4T) predicted event at I80, or

For any North Walnut Creek >9' and rising event at Hickman Road:

- Cancel any scheduled CEC events

For any Walnut Creek >13.5' (9T) predicted event at I80, or

For any North Walnut Creek >9' and rising event at Hickman Road:

- Turn off electrical power at the main electrical panel in the Mechanical Room (NE corner of building – interior).
- Turn off natural gas at the meter, located near the NE corner of the building (exterior).
- Turn off water at the main valve, located in the Utility Room, directly East of the Kitchen (interior).
- Install flood protection over doorways. Options include:
 - Sandbags

10.3 City Hall [Coordinated by City Clerk, with City Admin as backup]

Location: 1145 66th Street, Suite 1

For any Level 2 predicted event:

- City Hall will be closed.
- Doors will be locked, and a sign will be posted to make it known that City operations are centralized at the Public Safety Building.

11 Evacuations – [Responsibility: Fire & Police]

This section identifies areas requiring evacuation notifications, preparation for search and rescue efforts, and provisions for short-term relocation centers. Some individuals at risk may be unaware of the flood hazard (particularly shut-ins or the elderly), and others may choose to ignore flood warnings. Because of these realities, plans to evacuate, rescue, and/or relocate have been developed, as outlined in this section.

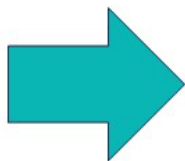
11.1 Evacuation Notifications

Staff will make every effort to conduct door-to-door courtesy evacuation notifications. These notifications are intended to bring attention to possible flooding and encourage those in evacuation areas to evacuate or be prepared to evacuate quickly.

This job aid can be distributed to staff in print or via cell phone to share with those receiving evacuation notifications. It provides the message script and a visual depiction of scanning a QR code to assist those speaking non-English languages. (Many web browsers offer built-in language translation features to help users translate content on web pages.) The QR code takes the user to the City of Windsor Heights webpage.



Flooding Emergency

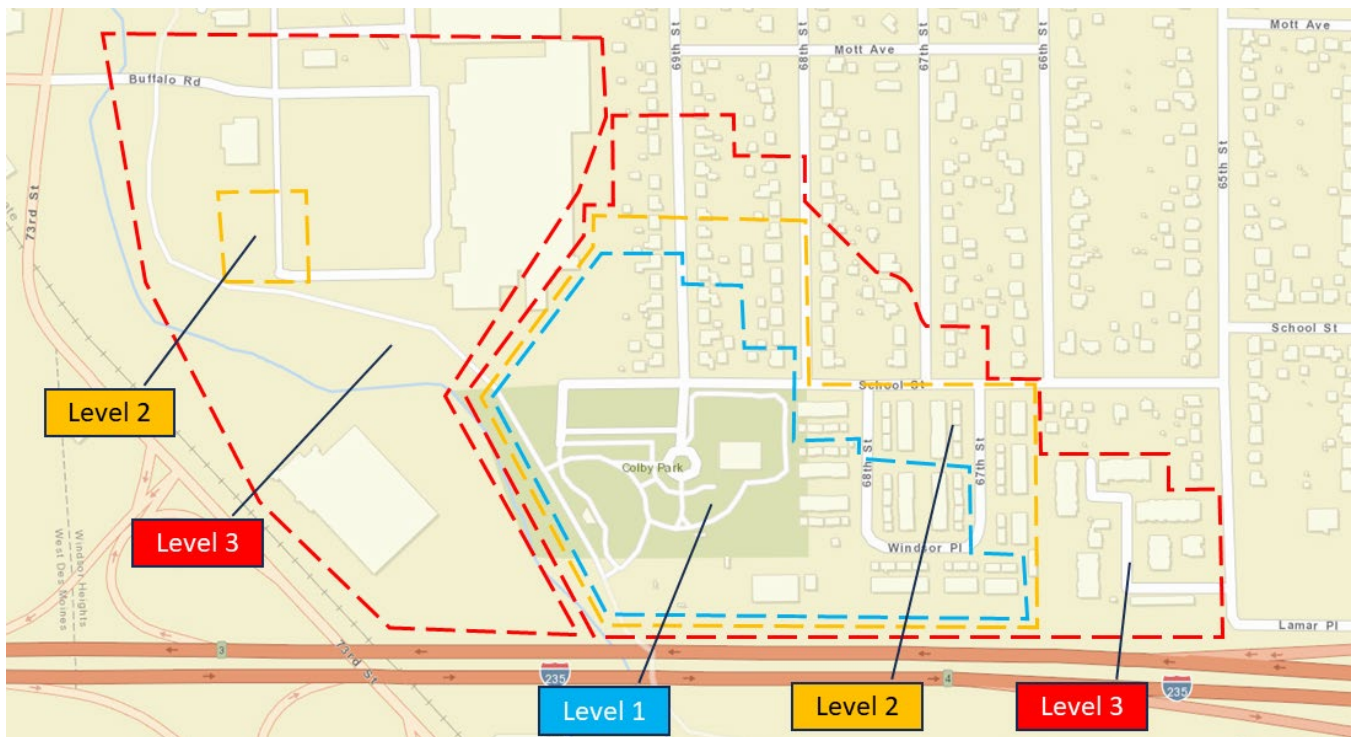


Windsor Heights is under a flood warning and is projected to flood. Your area will be impacted. You are advised to evacuate now or be prepared to evacuate quickly as flood waters rise. The most current flood information is available at the City of Windsor Heights website www.windsorheights.org.

11.1.1 Area 1 - Center Street to I235 - Evacuation Notifications



11.1.2 Area 2 - I235 to Mott Avenue - Evacuation Notifications



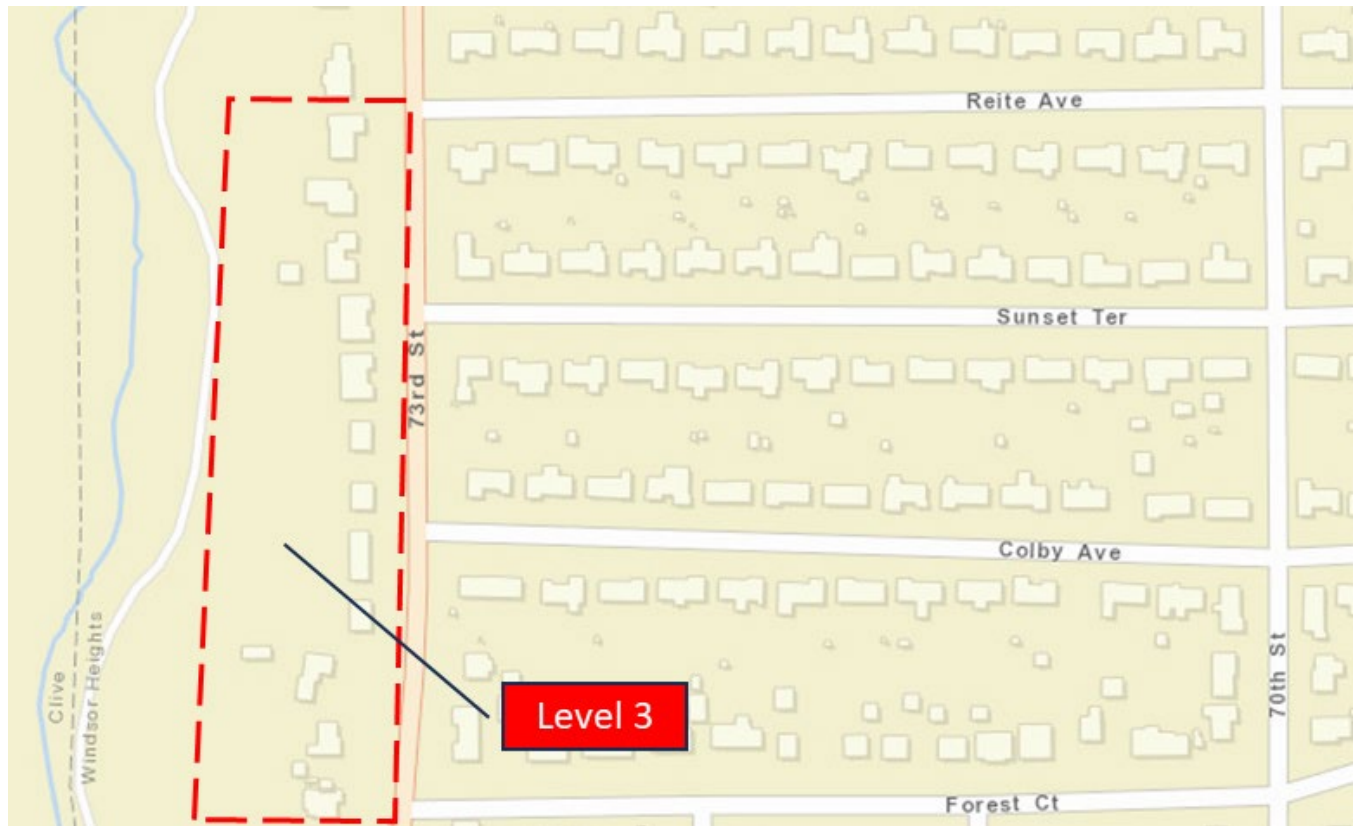
11.1.3 Area 3 - Mott Avenue to University - Evacuation Notifications



11.1.4 Area 4 - University to Forest Court - Evacuation Notifications



11.1.5 Area 5 - Forest Court to Reite Ave - Evacuation Notifications



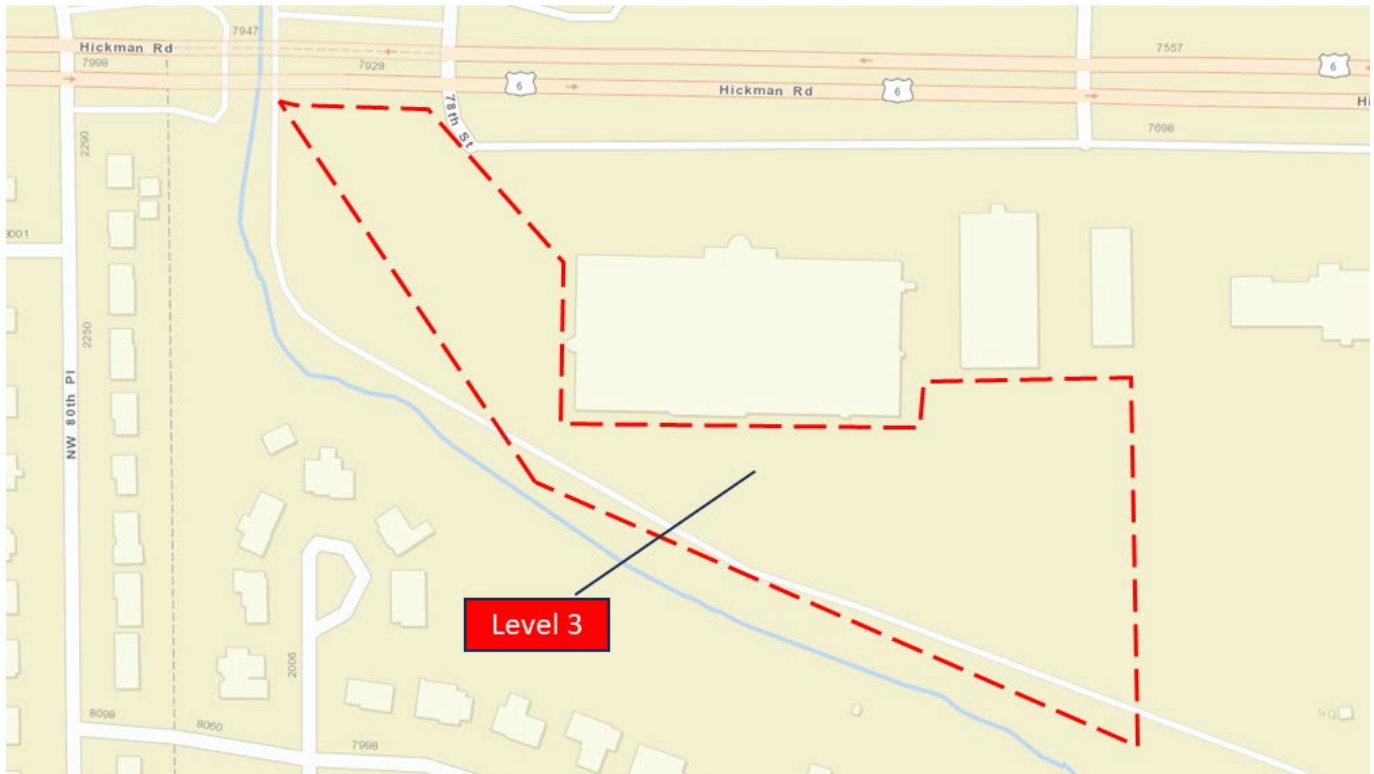
11.1.6 Area 6 - Reite Ave to College Drive - Evacuation Notifications



11.1.7 Area 7 - College Drive to Marilyn Drive - Evacuation Notifications



11.1.8 Area 8 - Marilyn Drive to Hickman Road - Evacuation Notifications



11.1.9 Electrical Power for Inundated Areas

Mid-American Energy requests notification for any areas with structures flooded or for imminent flooding. Call 800-275-5743 (this is a Public Safety Only Number, not for public use).

12 Search & Rescue – [Responsibility: Fire]

During the following levels, a water rescue boat team will be staged at Station 55 for potential rescues:

- Level 3

If the water rescue team is not familiar with Windsor Heights geography and/or direct radio communications cannot be established, a Windsor Heights Fire Department liaison should be assigned to the team.

Water Rescue Teams/Boats			
Department	Boat Type(s)	Dispatch	Notes
Altoona Fire	Zodiak & Flat-Bottom	Polk County	Shared Trailer / Shared Motor
Ankeny Fire	Zodiac	Polk County	
Central Iowa Underwater Search & Rescue	Flat-Bottom	Polk County	
Clive Fire	Flat-Bottom	Westcom	
Des Moines Fire	Zodiak & Flat-Bottom	Des Moines	Combo Trailer
Indianola Fire	Zodiac	Warren County	
Iowa DNR	Flat-Bottom	Iowa DNR	Nate Anderson 238-4849 Austin Durnan 238-5006
Johnston-Grimes	Zodiak & Flat-Bottom	Polk County	Combo Trailer
Norwalk Fire	Zodiac	Westcom	
Pleasant Hill Fire	Zodiak & Flat-Bottom	Polk County	Separate Trailers
West Des Moines Fire	Zodiak & Flat-Bottom* *River/Deeper Water	Westcom	Separate Trailers

13 Short-Term Relocation

The initial goal when evacuating people is to protect them from hazards caused by flooding. Citizens unable to secure a safe place away from flooding hazards may require an Evacuation Center for short-term relocation or an Emergency Sheltering for longer term needs.

Type	Purpose	Location	Contact
Evacuation Center	The initial action is to bring or direct evacuees to an Evacuation Center, which is a safe location that provides temporary shelter. Use for initial, short-term protection from the elements. Restrooms and drinking water are provided. Food and sleeping arrangements are not provided.	Giovannetti Shelter, Walker Johnston Park, 9000 Douglas Avenue, Urbandale	Urbandale Fire Department On-Duty Battalion Chief at 515-744-8709 or an Urbandale Fire Department Chief Officer
Emergency Sheltering	If extended evacuation sheltering is needed, the secondary action is to request access to an Emergency Shelter arrangement through Polk County Emergency Management. The Emergency Shelter could be a variety of solutions, depending on the overall number of people (both from Windsor Heights flooding and regional flooding) needing sheltering. Sheltering involves a longer timeframe that includes the need to accommodate sleeping and food arrangements.	TBD by Polk County Emergency Management based on event circumstances	Polk County Emergency Management Duty Officer at 515-286-2107 during normal business hours or through Polk County Dispatch at 515-286-3333.

Relocation transportation can be provided by:

- Windsor Heights Staff - If time and resources allow without jeopardizing mission-critical flood response plan actions.
- DART – Requests for transportation assistance through DART are coordinated through Polk County Emergency Management (515-286-2107).

14 Road & Trail Closures – [Responsibility: Public Works]

Trail Closures

- Occur during the Pre-Warning Level.

Trail Closure Plan

- Monitoring: Staff shall monitor trails and weather conditions for the need for actual closure
- Closure: Deployment of barricades/signs upon actual or probable flood waters encroaching on trails

Road Closures

- Occur during Warning Levels 1 - 3.

Road Closure Plan

- Preparation: Pre-positioning of barricades/signs located at points of planned deployment in advance of actual closure
- Monitoring: Staff shall monitor roads for the need of actual closure
- Closure: Deployment of barricades/signs upon actual flood waters encroaching on roadways and reporting the actual closure to the Windsor Heights EOC
 - Staffing of road closures is desired if staffing allows
 - Priorities for staffing road closures are indicated as HIGH or LOW in the planning maps
- Re-Opening: Removal of barricades/signs and reporting the re-opening to the EOC

Street Name	LEVEL 1				LEVEL 2			LEVEL 3			
	10yr/10% Chance				25yr/4% Chance			50yr/2% Chance			
	4T	5T	6T	7T	8T	9T	10T	12T	15T	20k	24T
School Street			W of 68th St	→	→	W of 67th St	W of 66th St	→	→	→	→
69th Street			S of Mott Ave	→	→	→	→	→	→	→	→
Mott Avenue			S on 69th St	→	→	South on 68th St	South on 67th St	→	→	→	→
Intersection - 70th/Washington			Monitor Localized Flooding	→	→	→	→	→	→	→	→
College Dr - W of 73rd to W of NWC			Monitor Localized Flooding	→	→	→	→	→	→	→	→
Center Street			W of 65th St	→	→	→	→	→	→	→	→
73rd St NB				N of Center St	→	→	N of Office Park Rd	→	→	→	→
68th Street						S of Mott Ave	→	→	→	→	→
67th Street							S of Mott Ave	→	→	→	→
73rd St SB							S of Uni	→	→	→	→
I235 WB 73rd St Off Ramp							at I235	→	→	→	→
University Avenue							W of Hy-Vee Entrance	→	→	→	→
I235 EB 73rd St Off Ramp							at I235	→	→	→	→
Walnut Creek Trail Location	4T	5T	6T	7T	8T	9T	10T	12T	15T	20k	24T
Center Street	W of Storage Entrance	→	→	W of 65th St (paired with Street closure)	→	→	→	→	→	→	W of 63rd St (paired with Street closure)
School Street	W of 69th St	→	W of 68th St (paired with Street Closure)	→	→	W of 67th St (paired with Street closure)	W of 66th St (paired with Street closure)	→	→	→	→
Colby Park	S of School St	→	→	→	→	→	→	→	→	→	→
Colby Park - Icon Trail Access	SW of Parking Lot	Inundation reaches parking lot	→	→	→	→	→	→	→	→	→
City Wide Heating	W of 73rd St										
Walmart/Sams	N of Buffalo Rd	→	→	→	→	→	→	→	Inundation reaches parking lot	→	→
Clive Elementary	Trail Head from School	→	→	→	→	→	→	→	Inundation reaches 73rd St	→	→
College Drive	N of College Dr	→	→	→	→	→	→	→	→	→	→
Hickman & 78th	NW of Parking Lot	→	→	→	→	→	→	→	Inundation reaches parking lot	→	→
Hickman & 80th Place	Sidewalk W of NWC	→	→	→	→	→	→	→	→	→	→

Street Name	LEVEL 1					LEVEL 2				LEVEL 3				
	4T	5T	6T	7T	8T	9T	10T	12T	15T	20T	24T	50yr/10% Chance	100yr/1% Chance	500yr/0.2% Chance
School Street			W of 68th St S of Mott Ave	→	→	→	→	→	→	→	→	→	→	→
69th Street			S on 68th St	→	→	→	→	→	→	→	→	→	→	→
Mott Avenue			Monitor Localized Flooding	→	→	→	→	→	→	→	→	→	→	→
Intersection - 70th/Washington			Monitor Localized Flooding	→	→	→	→	→	→	→	→	→	→	→
College Dr - W of 73rd to W of NWC				→	→	→	→	→	→	→	→	→	→	→
Center Street				→	→	→	→	→	→	→	→	→	→	→
73rd St NB				→	→	→	→	→	→	→	→	→	→	→
68th Street				→	→	→	→	→	→	→	→	→	→	→
67th Street				→	→	→	→	→	→	→	→	→	→	→
73rd St SB				→	→	→	→	→	→	→	→	→	→	→
I235 WB 73rd St Off Ramp				→	→	→	→	→	→	→	→	→	→	→
University Avenue				→	→	→	→	→	→	→	→	→	→	→
I235 EB 73rd St Off Ramp				→	→	→	→	→	→	→	→	→	→	→
Walnut Creek Trail Location														
Center Street	W of Storage Entrance	→	→	→	→	→	→	→	→	→	→	→	→	→
School Street	W of 68th St	→	→	→	→	→	→	→	→	→	→	→	→	→
Colby Park	S of School St	→	→	→	→	→	→	→	→	→	→	→	→	→
Colby Park - Icon Trail Access	SW of Parking Lot	Inundation reaches parking lot	→	→	→	→	→	→	→	→	→	→	→	→
City Wide Heating	W of 73rd St	→	→	→	→	→	→	→	→	→	→	→	→	→
Walmart/Sams	N of Buffalo Rd W of B-Bops	→	→	→	→	→	→	→	→	→	→	→	→	→
Clive Elementary	Trail Head from School	→	→	→	→	→	→	→	→	→	→	→	→	→
College Drive	N of College Dr	→	→	→	→	→	→	→	→	→	→	→	→	→
Hickman & 78th	NW of Parking Lot	→	→	→	→	→	→	→	→	→	→	→	→	→
Hickman & 80th Place	SW of Parking Lot	→	→	→	→	→	→	→	→	→	→	→	→	→
	Sidewalk W of NWC	→	→	→	→	→	→	→	→	→	→	→	→	→

14.1.1 Area 1 - Center Street to I235 - Road & Trail Closures



14.1.2 Area 2 - I235 to Mott Avenue - Road & Trail Closures



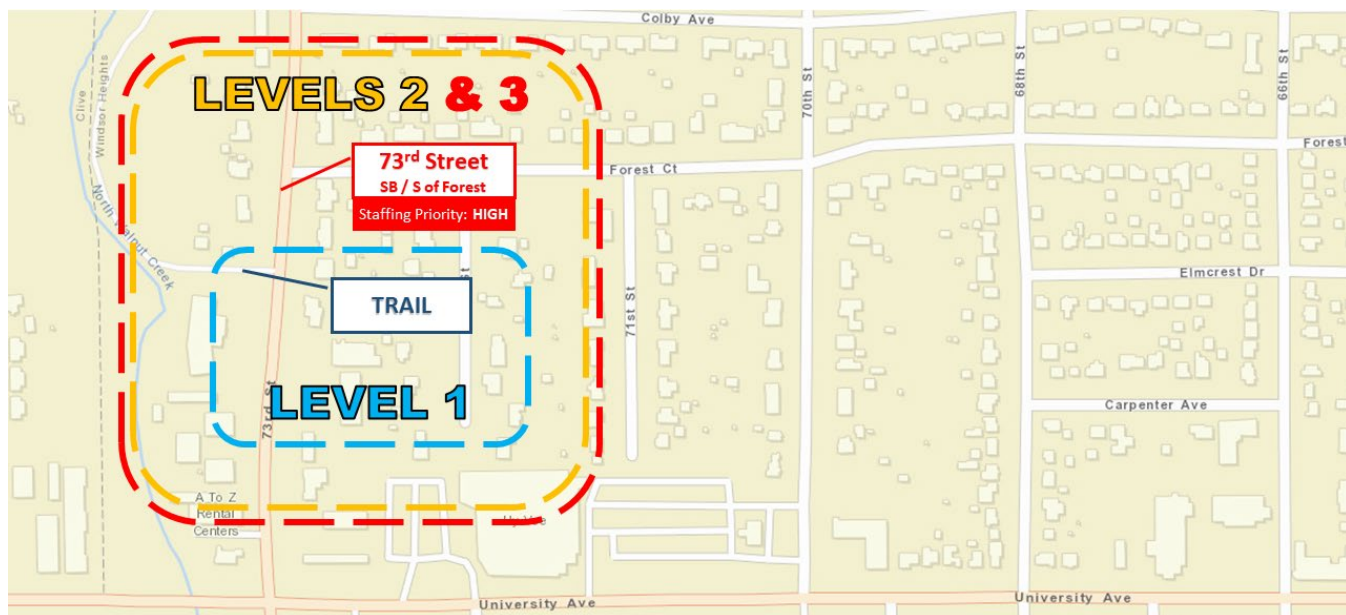
For I235 Offramp closures:

- Notify the DOT Traffic Management Center thru Westcom, or, at 515-237-3300 (this is a Public Safety Only Number, not for public use). The TMC will coordinate offramp closures, dynamic message board updates, and 511 updates.

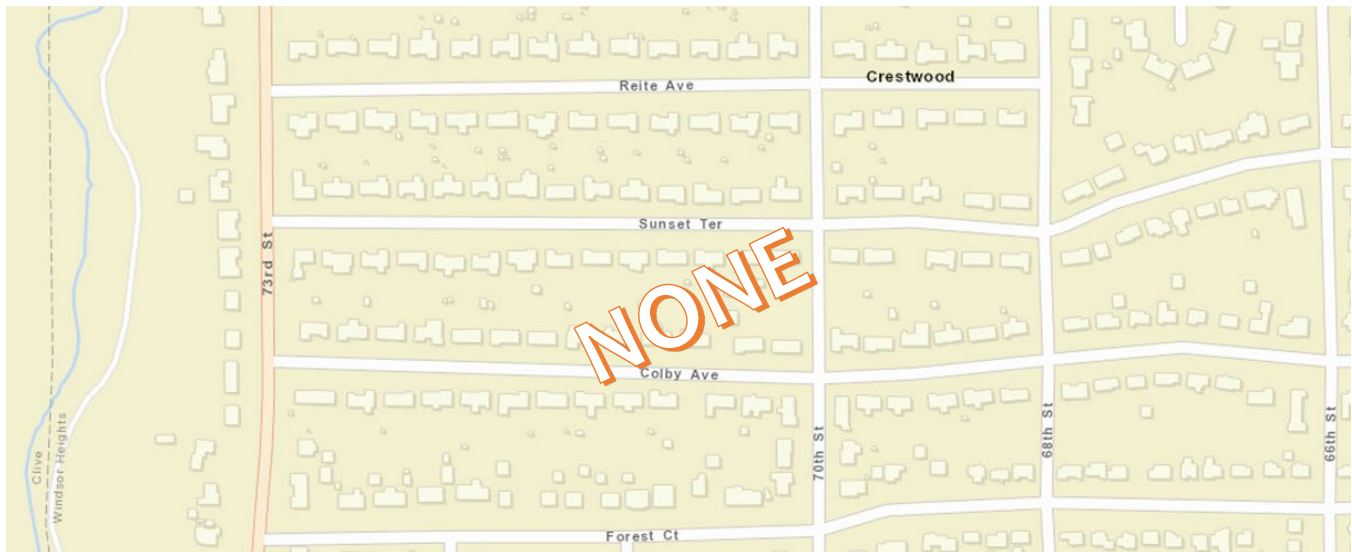
14.1.3 Area 3 - Mott Avenue to University - Road & Trail Closures



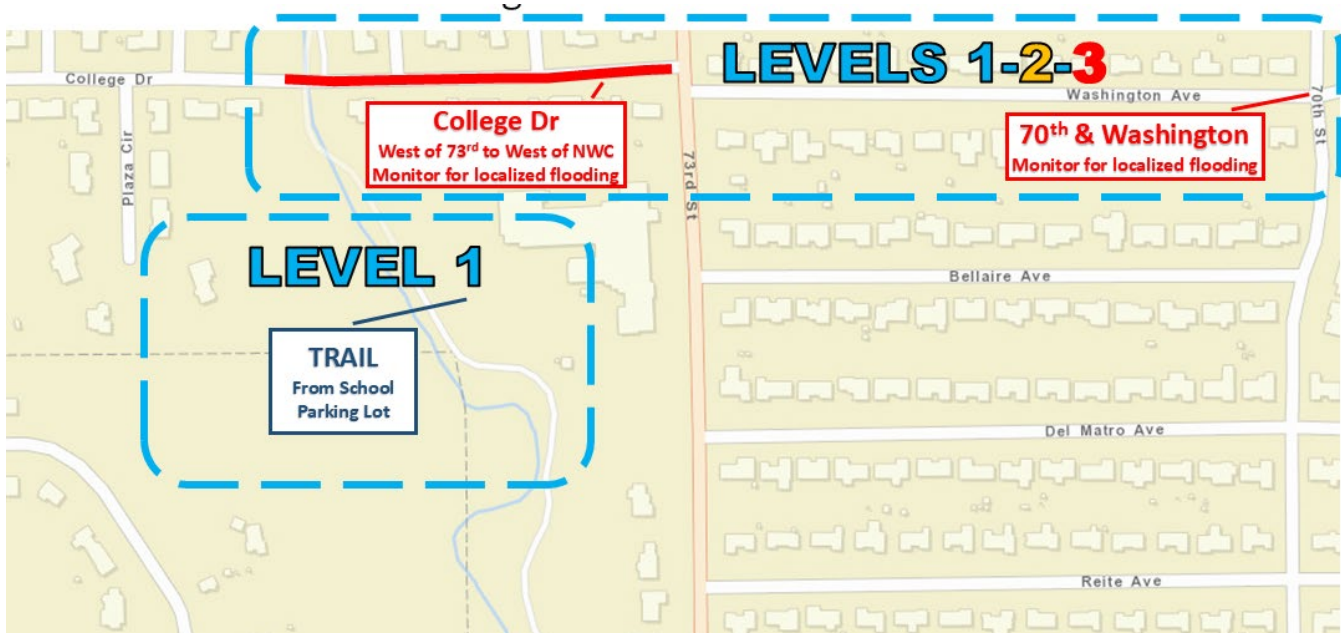
14.1.4 Area 4 - University to Forest Court - Road & Trail Closures



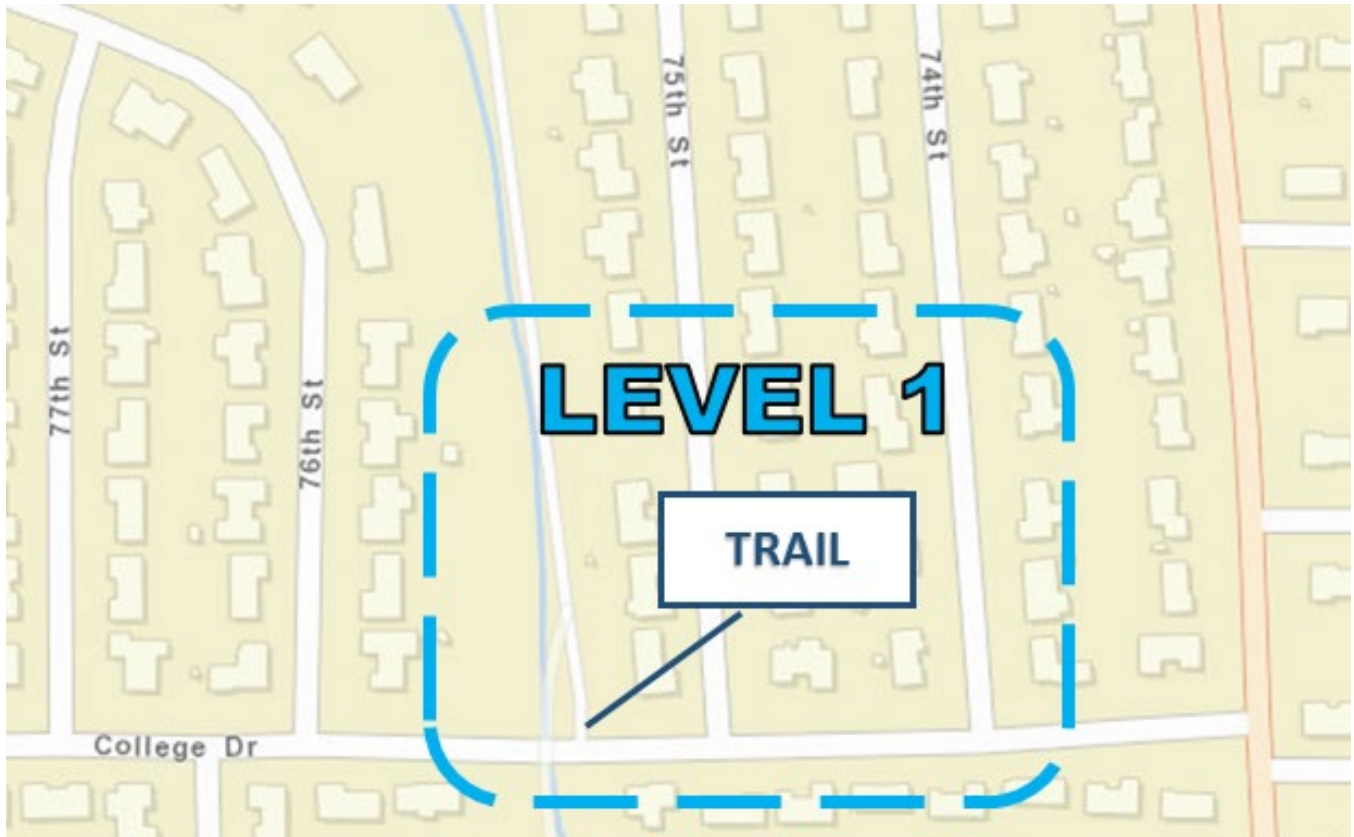
14.1.5 Area 5 - Forest Court to Reite Ave - Road & Trail Closures



14.1.6 Area 6 - Reite Ave to College Drive - Road & Trail Closures



14.1.7 Area 7 - College Drive to Marilyn Drive - Road & Trail Closures



14.1.8 Area 8 - Marilyn Drive to Hickman Road - Road & Trail Closures



15 Public Information – [Responsibility: City Administrator]

Public Information can be distributed in the following methods:

- Alert Iowa Messaging System
- Press Release
- Website
- Social Media

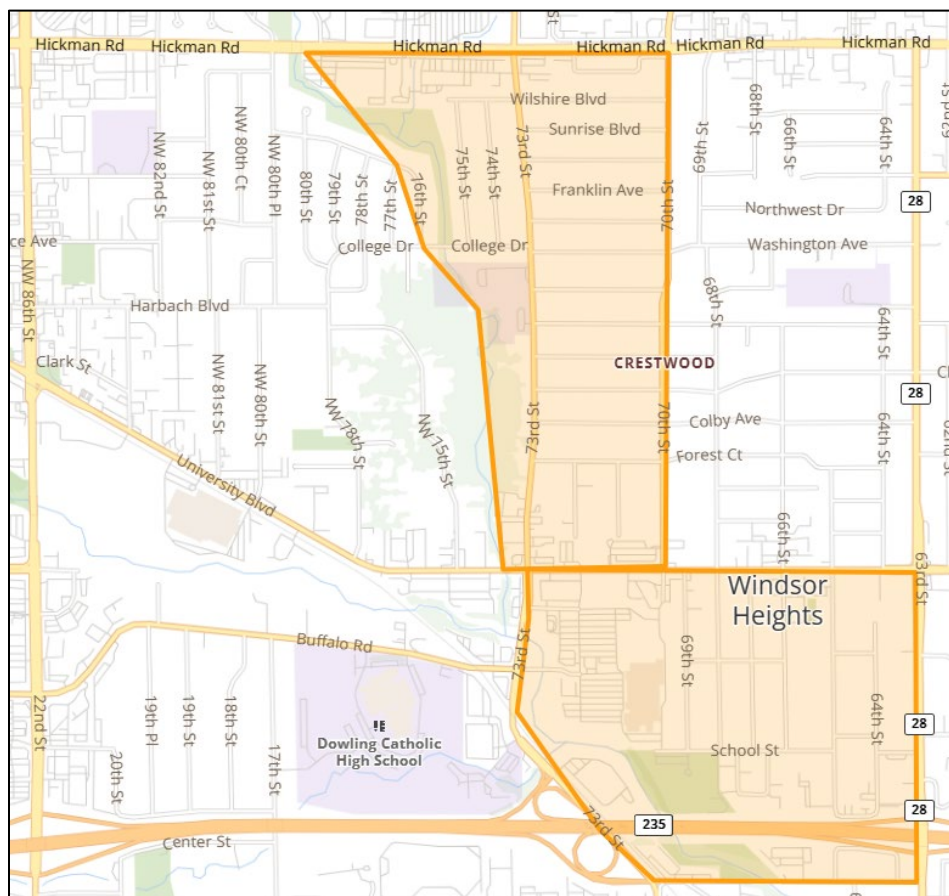
15.1 Alert Iowa Messaging

Alert Iowa messages for Response Levels 1 through 3 are pre-built and can be quickly sent by the following authorities:

- Designated Windsor Heights Staff:
 - City Administrator
 - Fire Chief
 - Police Chief
 - Public Works Director
 - Public Works Assistant Director
- Westcom 911 Dispatch Center
- Polk County Emergency Management

Customized messages may also be sent through the authorities listed above.

Pre-Built Alert Iowa Message Distribution Area (this area is intentionally larger than potential flood inundation areas as the community will be impacted by road closures):



15.2 Walnut Creek Pre-Built Alert Iowa Messages

Walnut Creek Level 1	
Message Type	Text
Voice TDD Email	URGENT - WH - This is important flood related information from the City of Windsor Heights regarding Walnut Creek. The National Weather Service has issued a flash flood warning for Walnut Creek in Windsor Heights. Levels on Walnut Creek are predicted to reach between 10.8 feet and 12.6 feet. Flood stage is 9 feet. You are receiving this message because your home, business, or travel may be impacted by flooding. Residents and businesses should monitor water levels and be prepared to evacuate quickly. Stay away from and stay out of flood waters. Call 9 1 1 if you are in a life threatening situation or cannot evacuate without assistance. For additional information go to the City of Windsor Heights' website www.windsorheights.org .
Text Message 160 limit	URGENT-WH-Flash Flood Warning-Walnut Creek in Windsor Heights-Call 911 if in danger or unable to evacuate- www.cityofwindsorheights.org for additional info.

Walnut Creek Level 2	
Message Type	Text
Voice TDD Email	URGENT - WH - This is important flood related information from the City of Windsor Heights regarding Walnut Creek. The National Weather Service has issued a flash flood warning for Walnut Creek. Levels on Walnut Creek are predicted to reach between: 13.1 feet and 13.9 feet. Flood stage is 9 feet. You are receiving this message because your home, business, or travel may be impacted by flooding. Residents and businesses should monitor water levels and be prepared to evacuate quickly. Stay away from and stay out of flood waters. Call 9 1 1 if you are in a life threatening situation or cannot evacuate without assistance. For additional information go to the City of Windsor Heights's website www.windsorheights.org .
Text Message 160 limit	URGENT-WH-Flash Flood Warning-Walnut Creek in Windsor Heights-Call 911 if in danger or unable to evacuate- www.cityofwindsorheights.org for additional info.

Walnut Creek Level 3	
Message Type	Text
Voice TDD Email	URGENT - WH - This is important flood related information from the City of Windsor Heights regarding Walnut Creek. The National Weather Service has issued a flash flood warning for Walnut Creek. Levels on Walnut Creek are predicted to reach between 14.6 feet and 18.1 feet. Flood stage is 9 feet. You are receiving this message because your home, business, or travel may be impacted by flooding. Residents and businesses should monitor water levels and be prepared to evacuate quickly. Stay away from and stay out of flood waters. Call 9 1 1 if you are in a life threatening situation or cannot evacuate without assistance. For additional information go to the City of Windsor Heights's website www.windsorheights.org .
Text Message 160 limit	URGENT-WH-Flash Flood Warning-Walnut Creek in Windsor Heights-Call 911 if in danger or unable to evacuate- www.cityofwindsorheights.org for additional info.

15.3 North Walnut Creek Pre-Built Alert Iowa Message

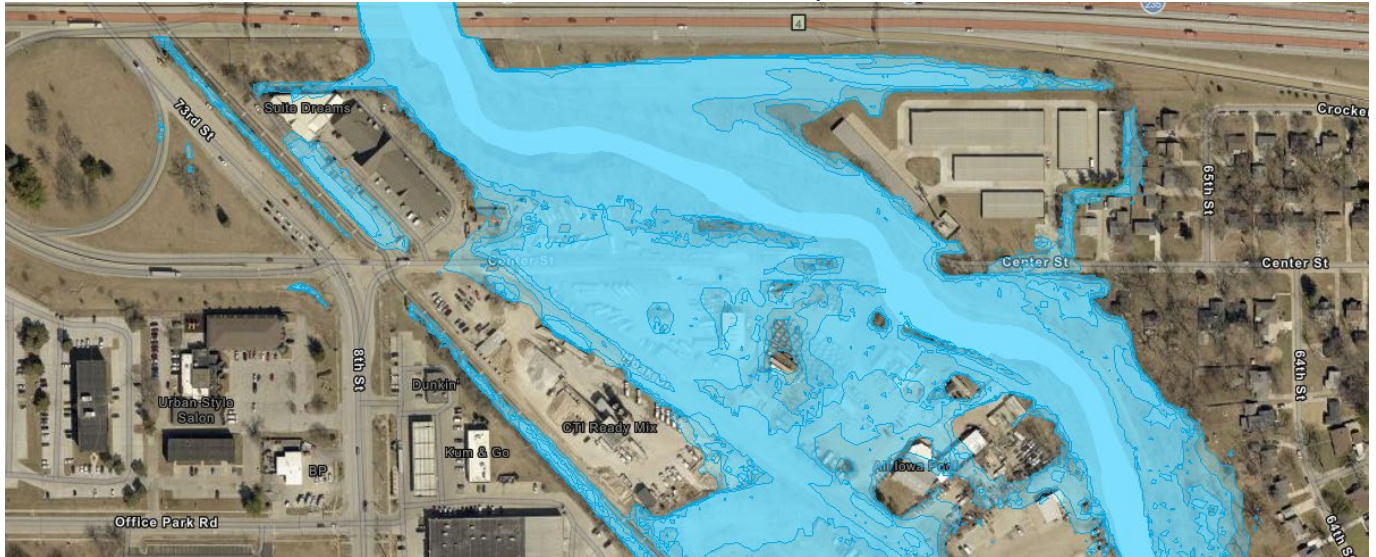
North Walnut Creek Level 3	
Message Type	Text
Voice TDD Email	URGENT - WH - This is important flood related information from the City of Windsor Heights regarding North Walnut Creek. Exceptionally high water levels on North Walnut Creek are converging with high waters on Walnut Creek. You are receiving this message because your home, business, or travel may be impacted by flooding. Residents and businesses should monitor water levels and be prepared to evacuate quickly. Stay away from and stay out of flood waters. Call 9 1 1 if you are in a life threatening situation or cannot evacuate without assistance. For additional information go to the City of Windsor Heights's website www.windsorheights.org .
Text Message 160 limit	URGENT-WH-Flood Emergency-North Walnut Creek in Windsor Heights-Call 911 if in danger or unable to evacuate- www.cityofwindsorheights.org for additional info.

16 Inundation Maps

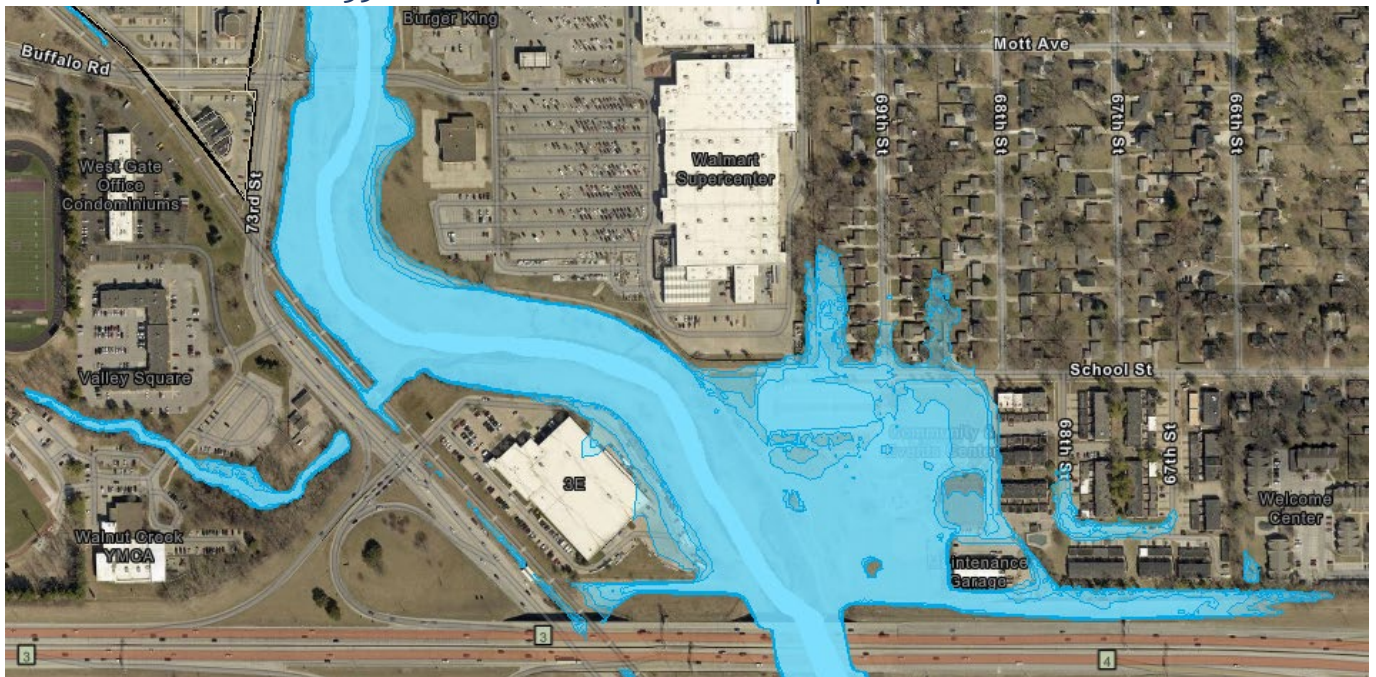
Sources: clive.maps.arcgis.com; ifis.iowafloodcenter.org

16.1 Level 1 Inundation Maps

16.1.1 Level 1 - Area 1 - Center Street to I235 - Inundation Map



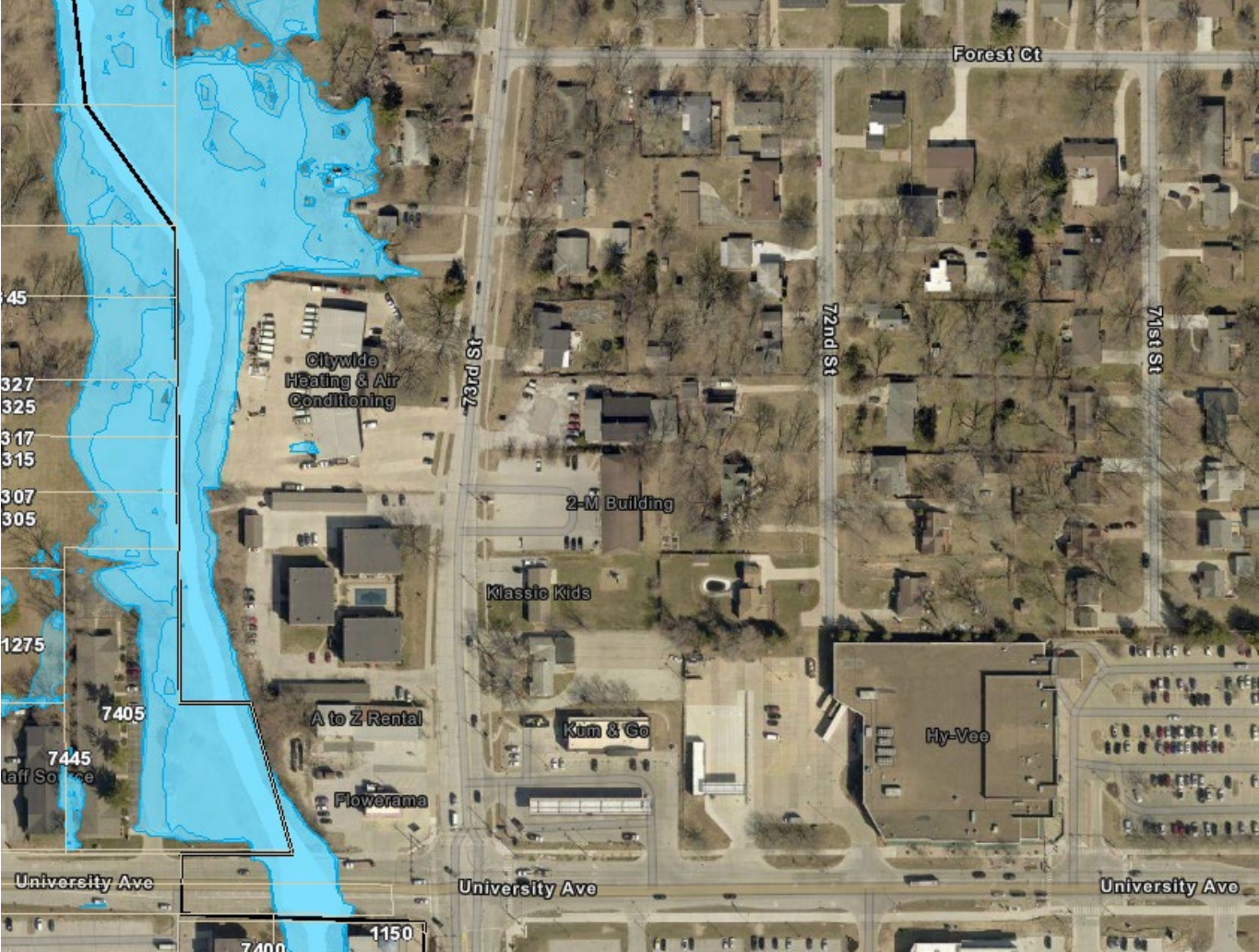
16.1.2 Level 1 - Area 2 - I235 to Mott Avenue - Inundation Map



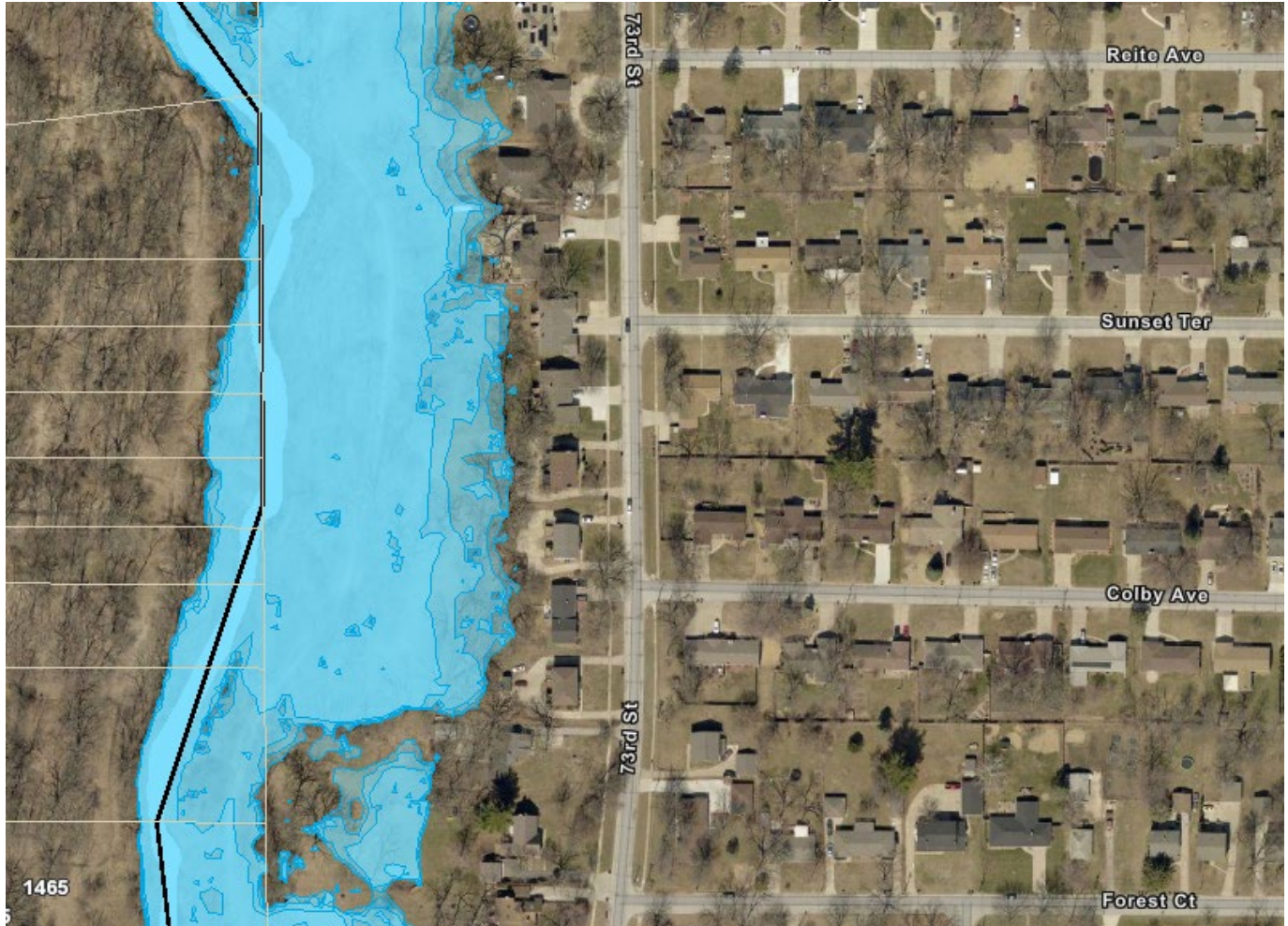
16.1.3 Level 1 - Area 3 - Mott Avenue to University - Inundation Map



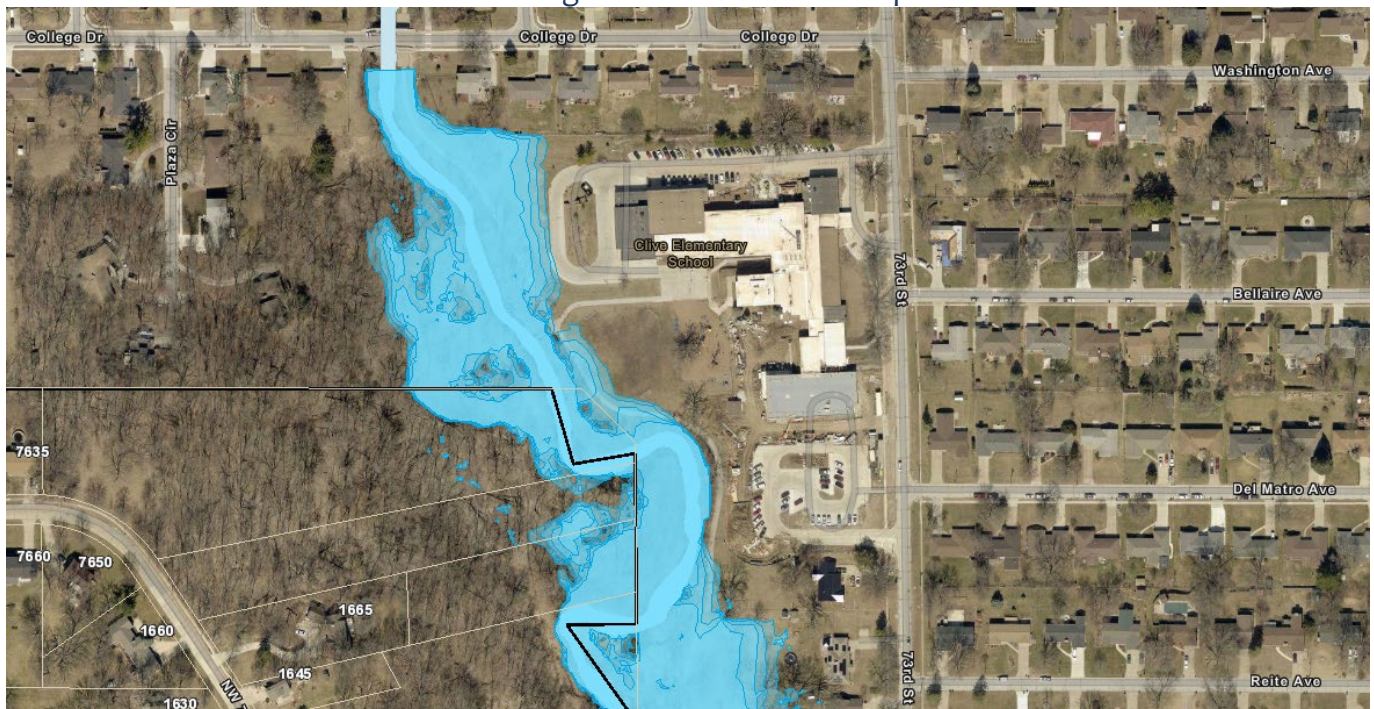
16.1.4 Level 1 - Area 4 - University to Forest Court - Inundation Map



16.1.5 Level 1 - Area 5 - Forest Court to Reite Ave - Inundation Map



16.1.6 Level 1 - Area 6 - Reite Ave to College Drive - Inundation Map



16.1.7 Level 1 - Area 7 - College Drive to Marilyn Drive - Inundation Map
Not available.

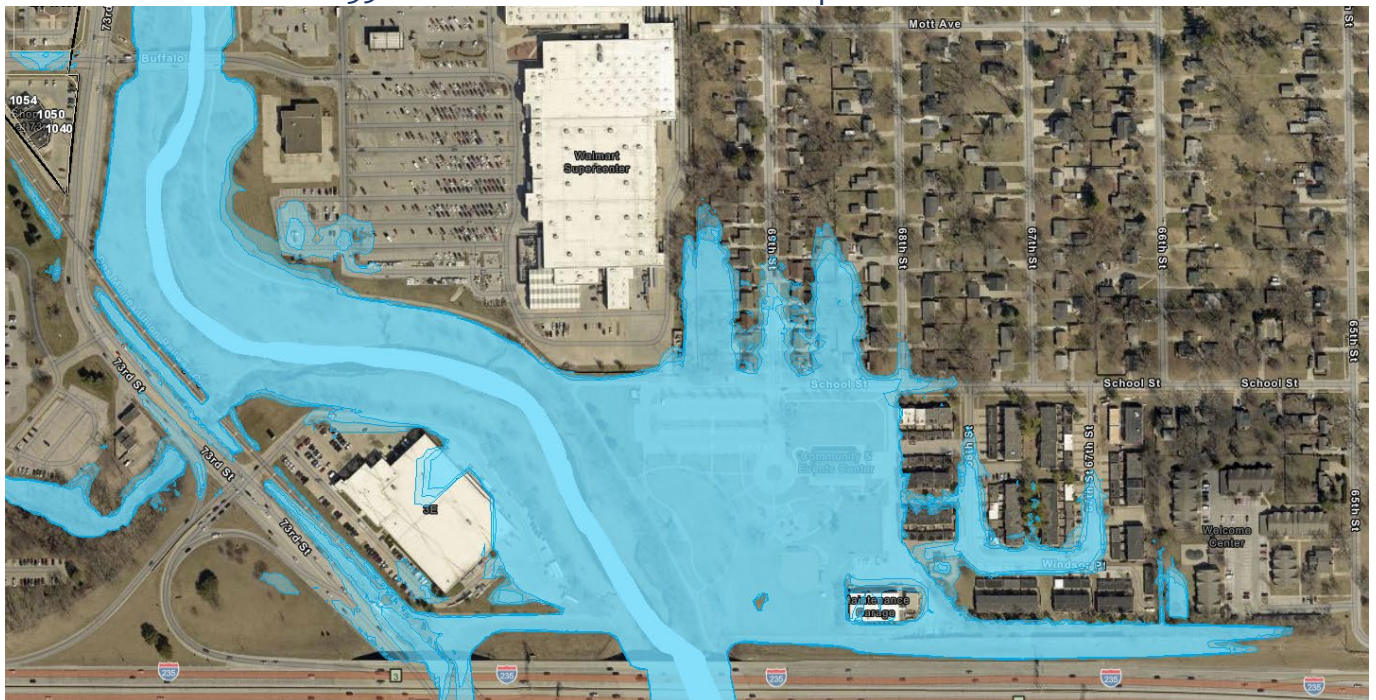
16.1.8 Level 1 - Area 8 - Marilyn Drive to Hickman Road - Inundation Map
Not available.

16.2 Level 2 Inundation Maps

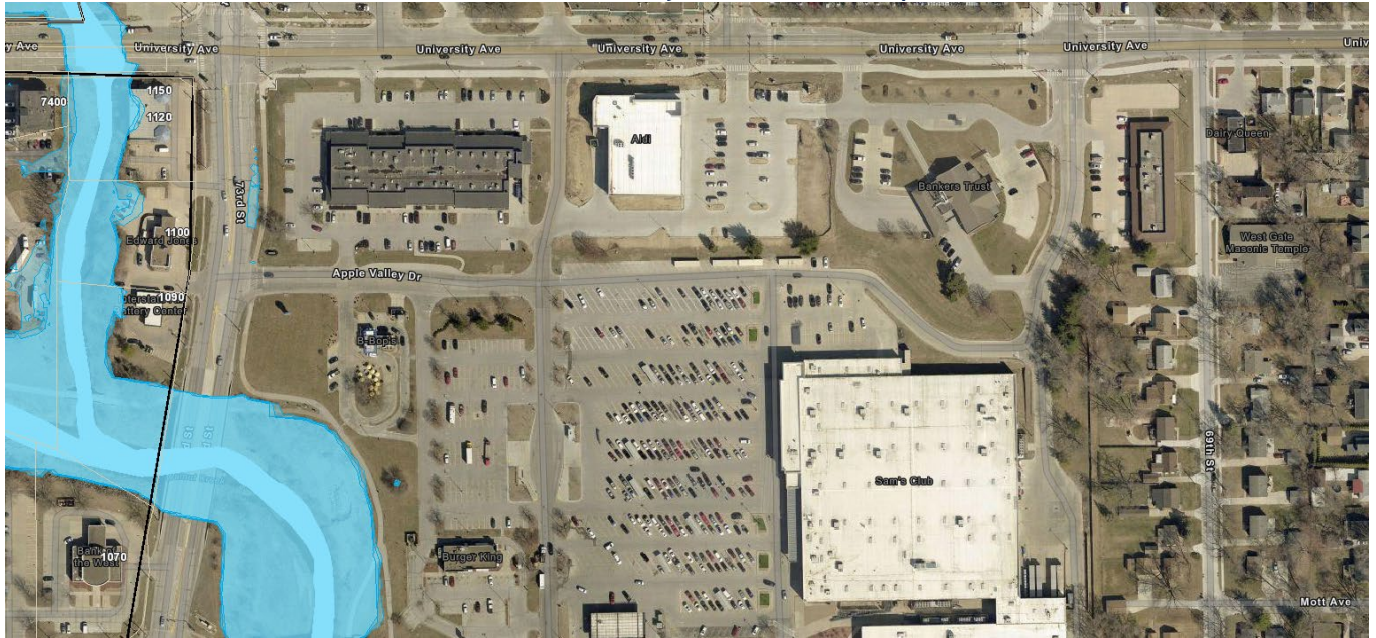
16.2.1 Level 2 - Area 1 - Center Street to I235 - Inundation Map



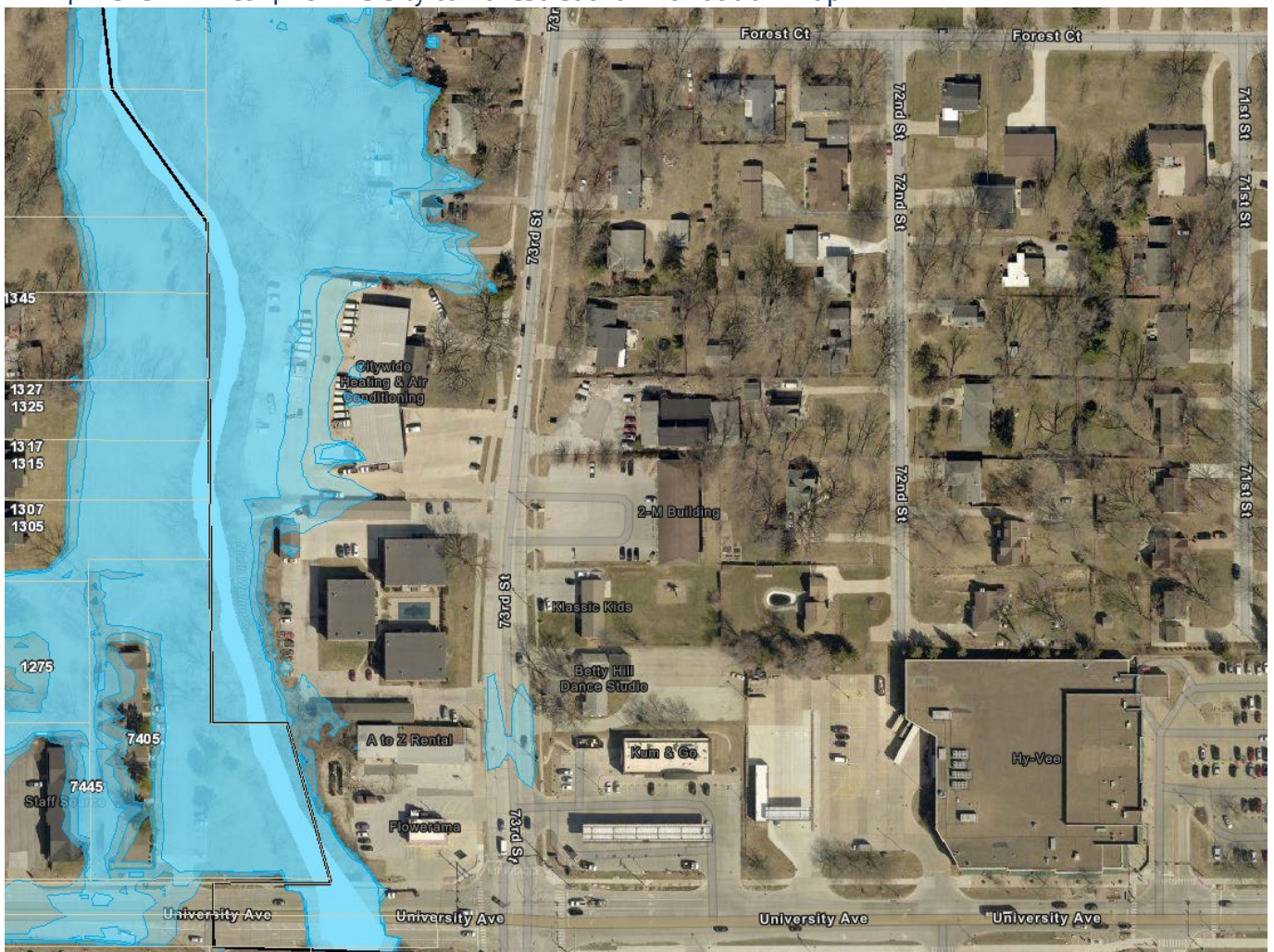
16.2.2 Level 2 - Area 2 - I235 to Mott Avenue - Inundation Map



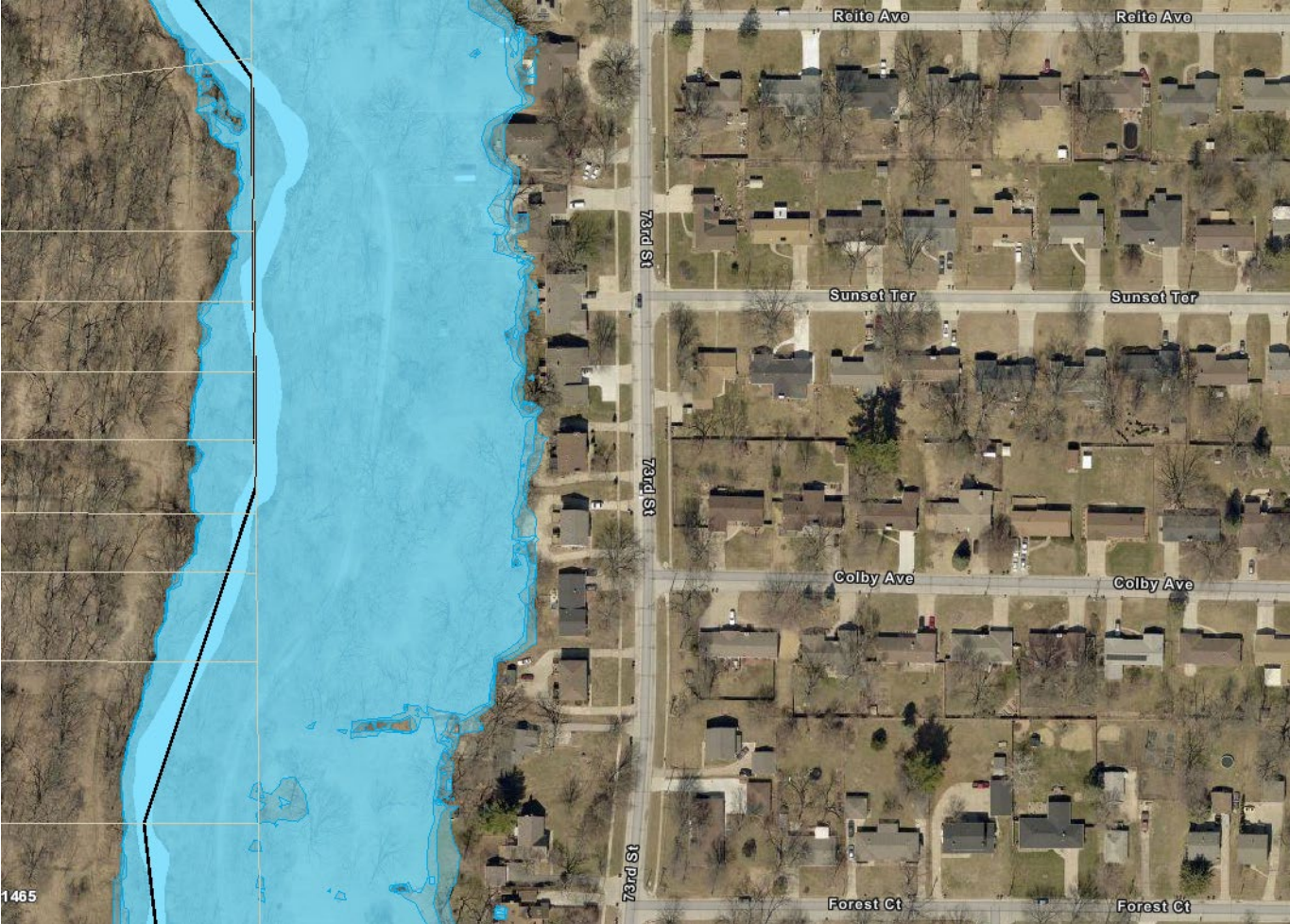
16.2.3 Level 2 - Area 3 - Mott Avenue to University - Inundation Map



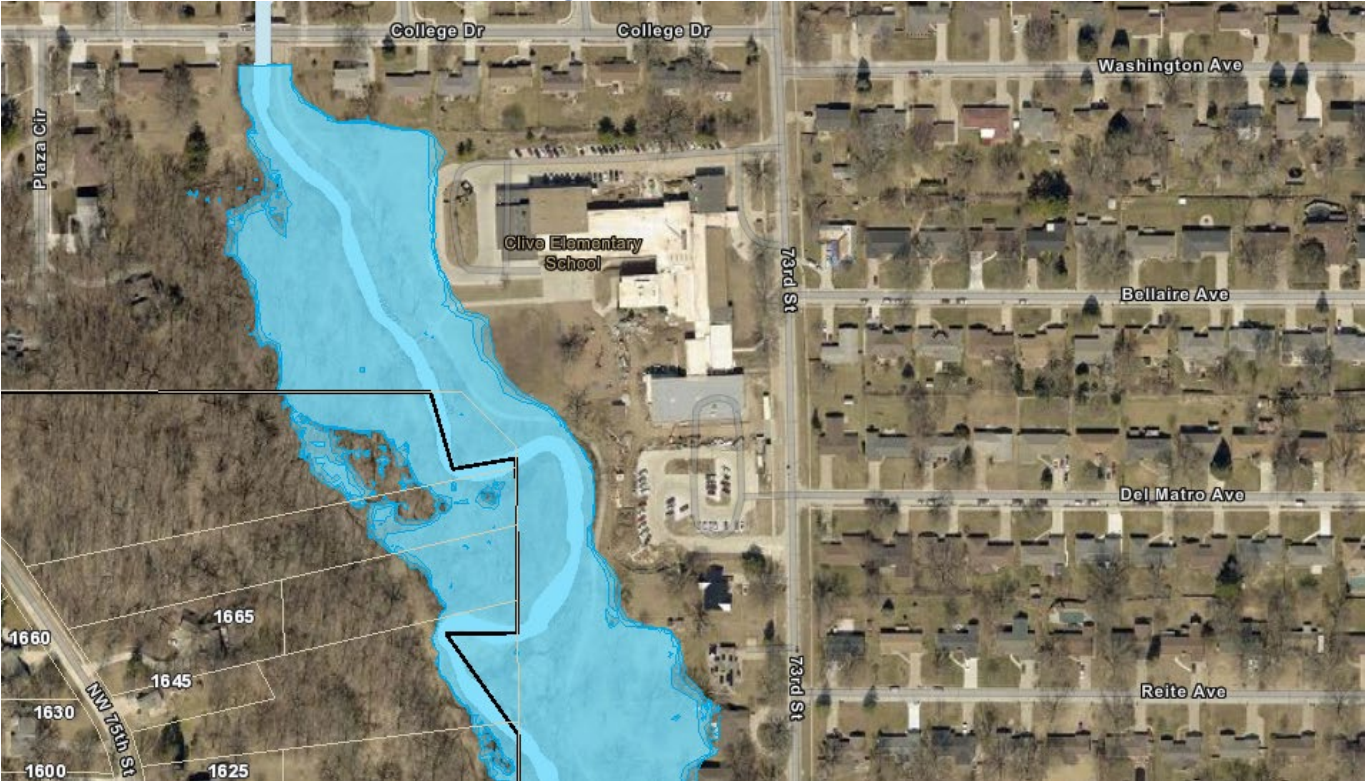
16.2.4 Level 2 - Area 4 - University to Forest Court - Inundation Map



16.2.5 Level 2 - Area 5 - Forest Court to Reite Ave - Inundation Map



16.2.6 Level 2 - Area 6 - Reite Ave to College Drive - Inundation Map



16.2.7 Level 2 - Area 7 - College Drive to Marilyn Drive - Inundation Map

Not available.

16.2.8 Level 2 - Area 8 - Marilyn Drive to Hickman Road - Inundation Map

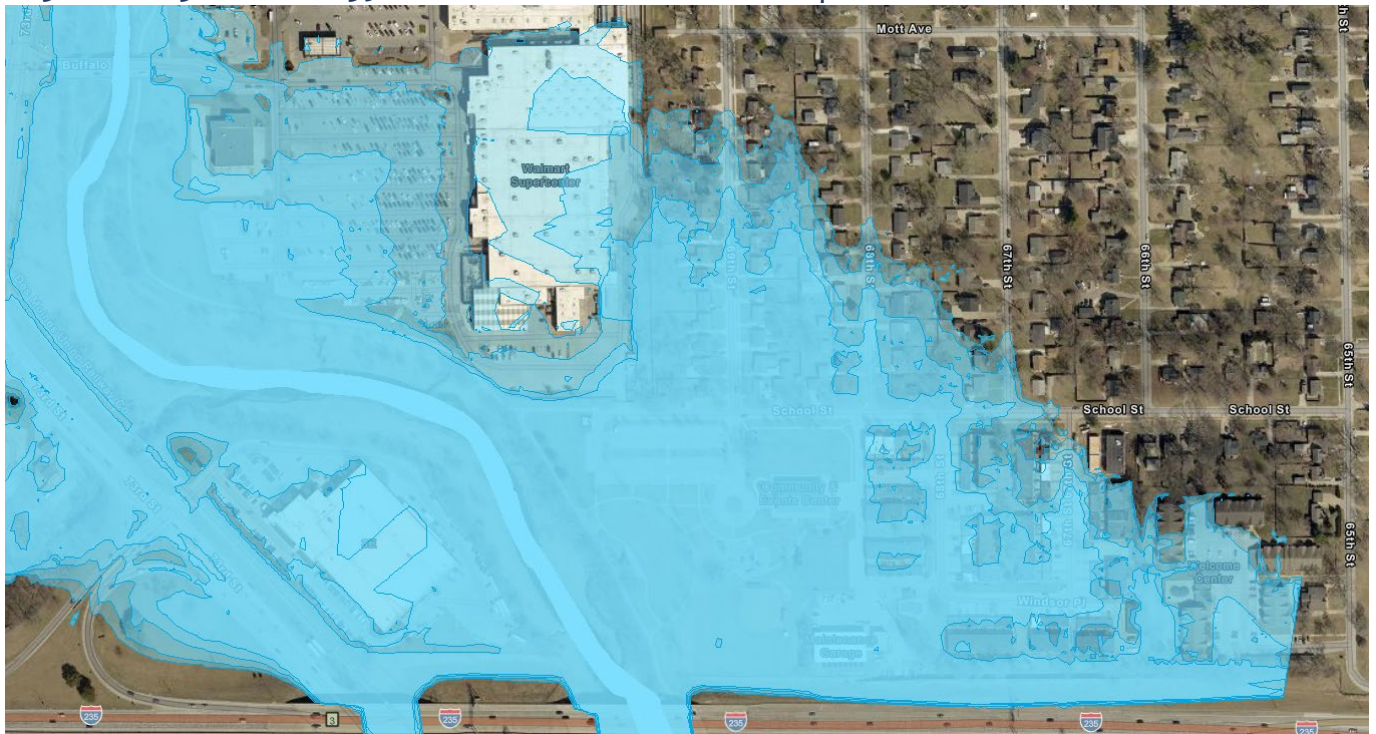
Not available.

16.3 Level 3 Inundation Maps

16.3.1 Level 3 - Area 1 - Center Street to I235 - Inundation Map



16.3.2 Level 3 - Area 2 - I235 to Mott Avenue - Inundation Map



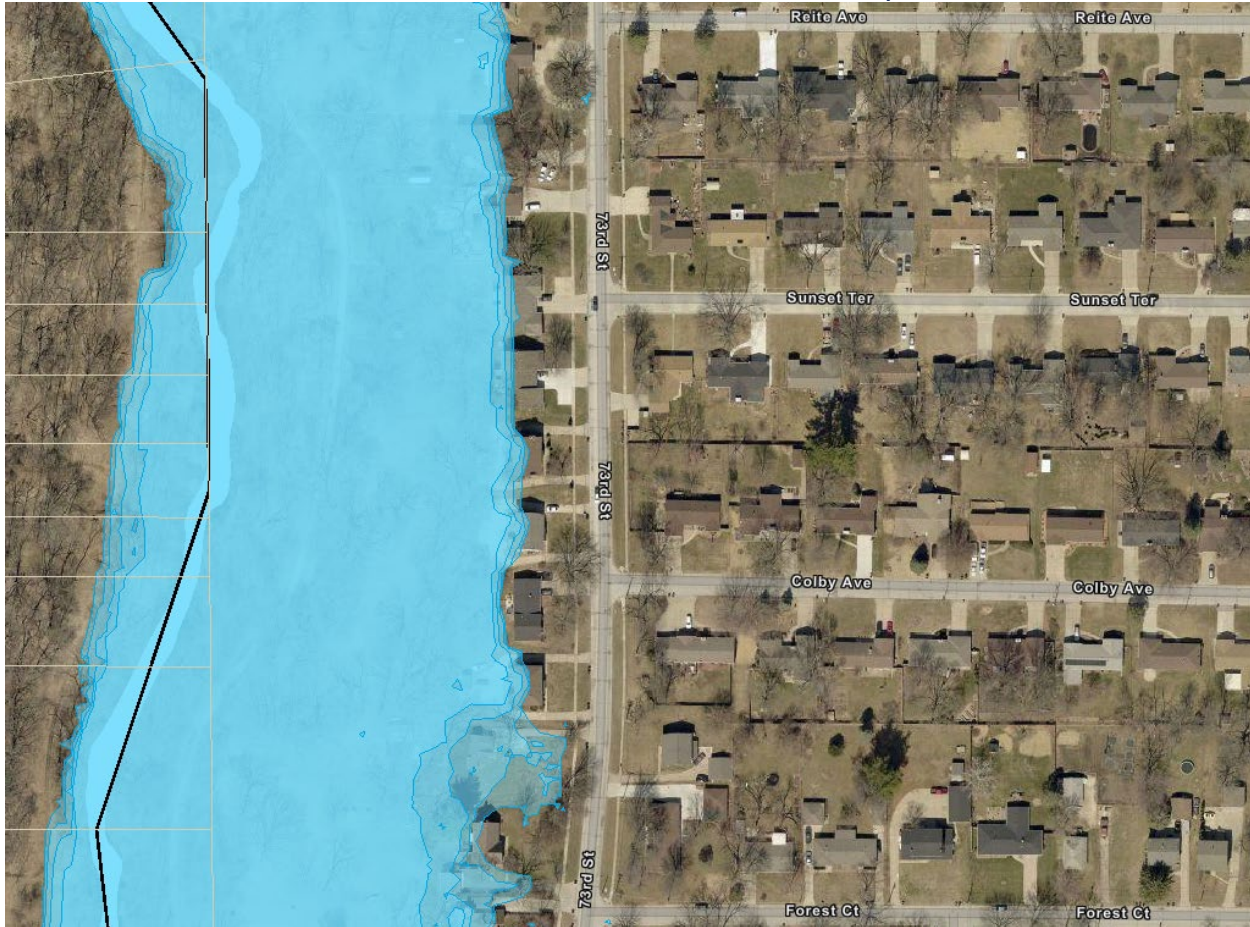
16.3.3 Level 3 - Area 3 - Mott Avenue to University - Inundation Map



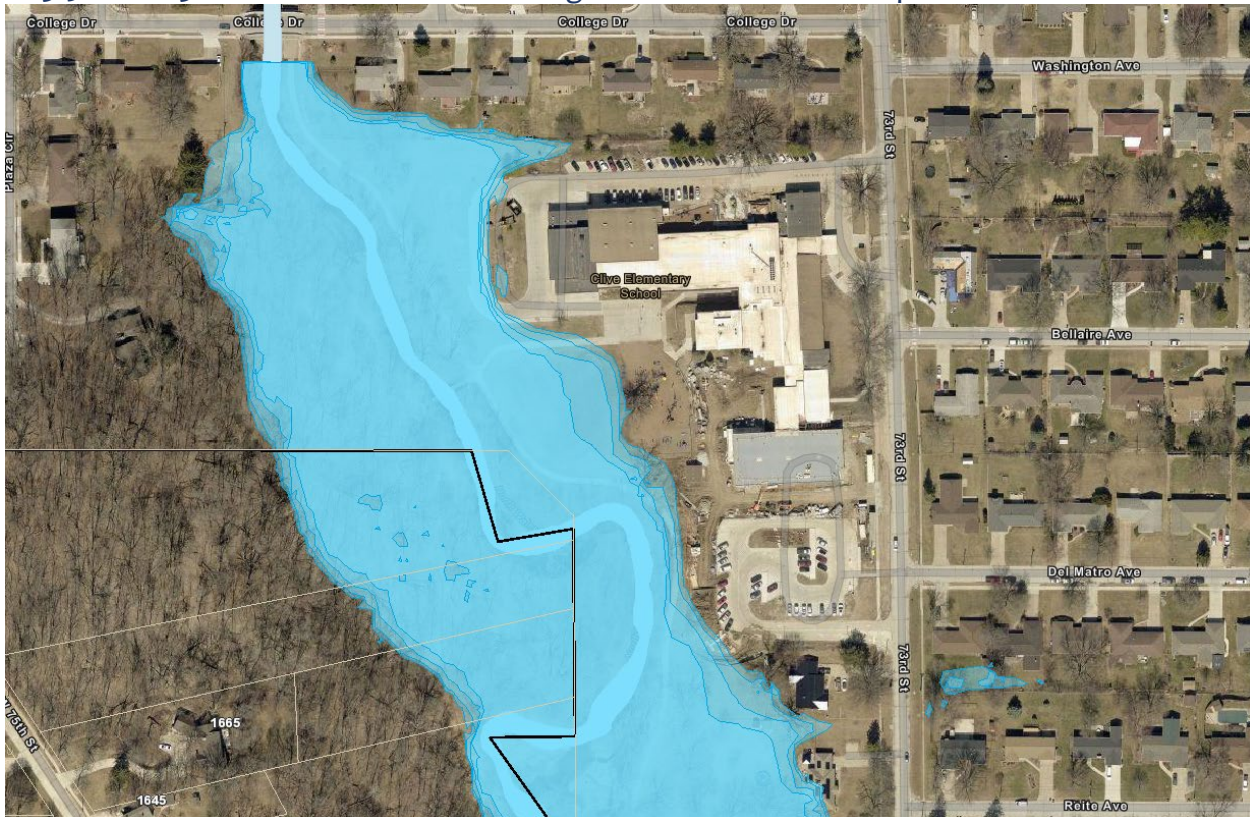
Level 3 - Area 4 - University to Forest Court - Inundation Map



16.3.4 Level 3 - Area 5 - Forest Court to Reite Ave - Inundation Map



16.3.5 Level 3 - Area 6 - Reite Ave to College Drive - Inundation Map



16.3.6 Level 3 - Area 7 - College Drive to Marilyn Drive - Inundation Map



16.3.7 Level 3 - Area 8 - Marilyn Drive to Hickman Road - Inundation Map

