

Subwatershed: Long Run Creek

Alternative: LRCR-5

Alternative Description:

Raise 143rd Street and construct weir

Conceptual Level Cost: \$ 862,668

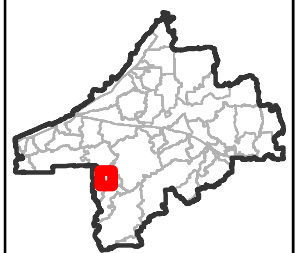
Benefits: \$ 51,147

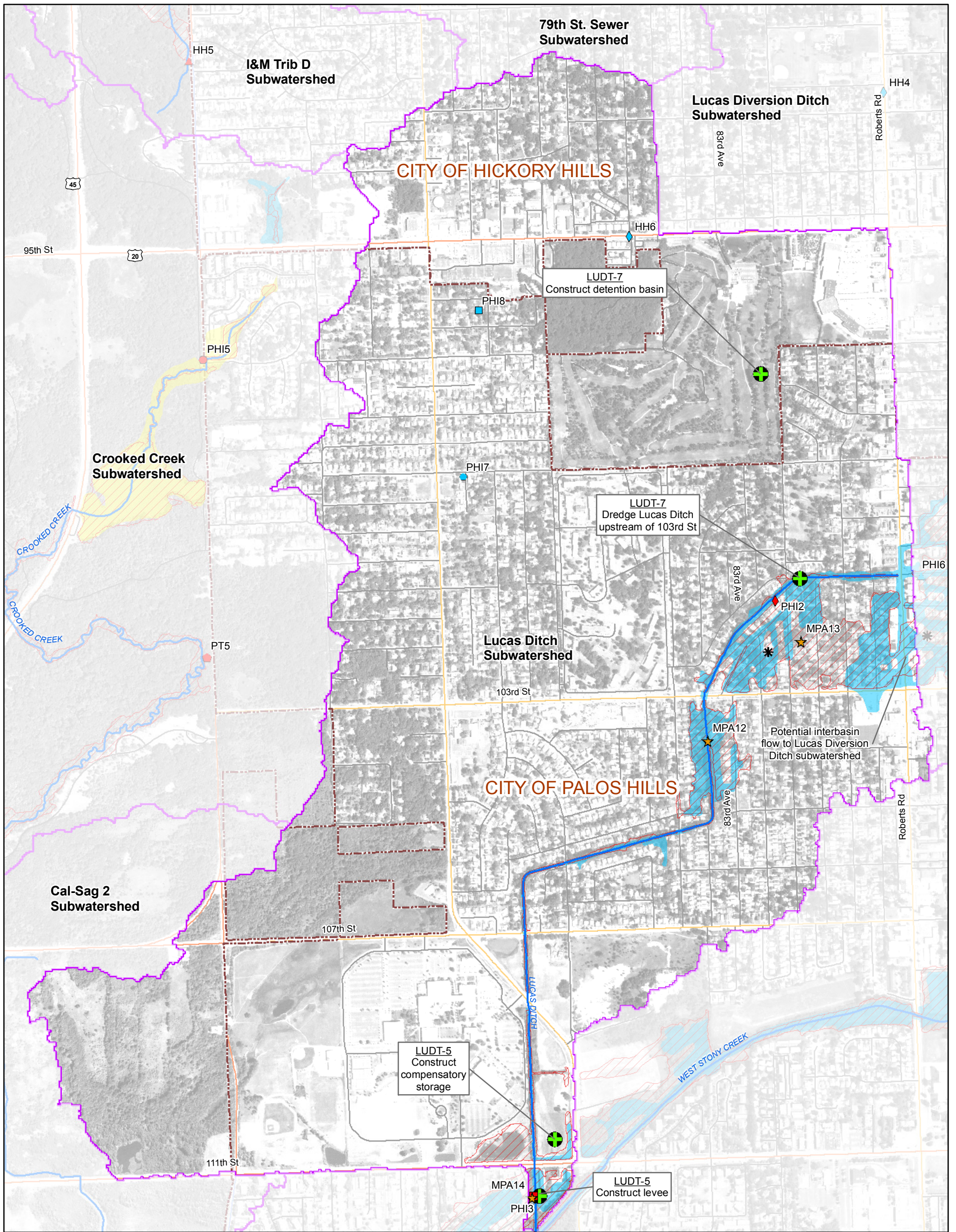
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LEGEND

- Project Alternative Location
 - 100-year Inundation Area With Project
 - 100-year Inundation Area Without Project
 - Calumet-Sag Channel
 - Watershed Boundary
- | | |
|--|---|
| <p>Roadway</p> <ul style="list-style-type: none"> Interstate US Highway Major Road Road | <ul style="list-style-type: none"> River/Stream Municipal Boundary Cook County Boundary |
|--|---|
- 0 290 580
Feet

Figure 3.17.2
 Long Run Creek
 Alternative LRCR-5
 Existing and Alternative Inundation Areas
 Calumet-Sag Channel Detailed Watershed Plan





LEGEND

Problem Type		★ Problem Area Identified Through Modeling	FEMA Floodplain	— River/Stream
Regional				
■ Bank Erosion	■ Bank Erosion	⊕ Project Alternative Location	☒ Zone AE	— Interstate
▲ Maintenance	▲ Maintenance	* Candidate Structure(s) for Floodproofing/Acquisition	☐ Calumet-Sag Channel Watershed Boundary	— US Highway
● Overbank Flooding	● Overbank Flooding	▨ DWP 100-year Inundation Area	▭ Subwatershed Boundary	— Major Road
◆ Pavement Flooding	◆ Pavement Flooding	⊘ Not Modeled in DWP		— Municipal Boundary
★ Ponding	★ Ponding			▭ Cook County Boundary
◆ Storm Sewer Flow Restriction	◆ Storm Sewer Flow Restriction			

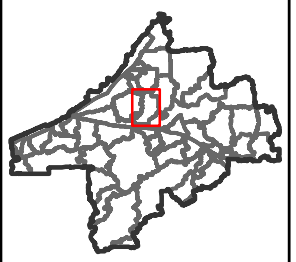


Figure 3.18.1
Tributary Overview: Lucas Ditch
Calumet-Sag Channel Detailed Watershed Plan



Subwatershed: Lucas Ditch

Alternative: LUDT-5

Alternative Description:

Construct levee

Conceptual Level Cost: \$ 3,136,900

Benefits: \$ 845,200

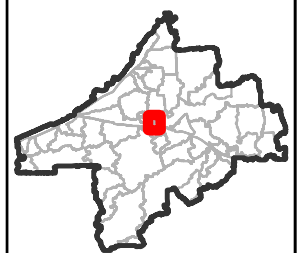
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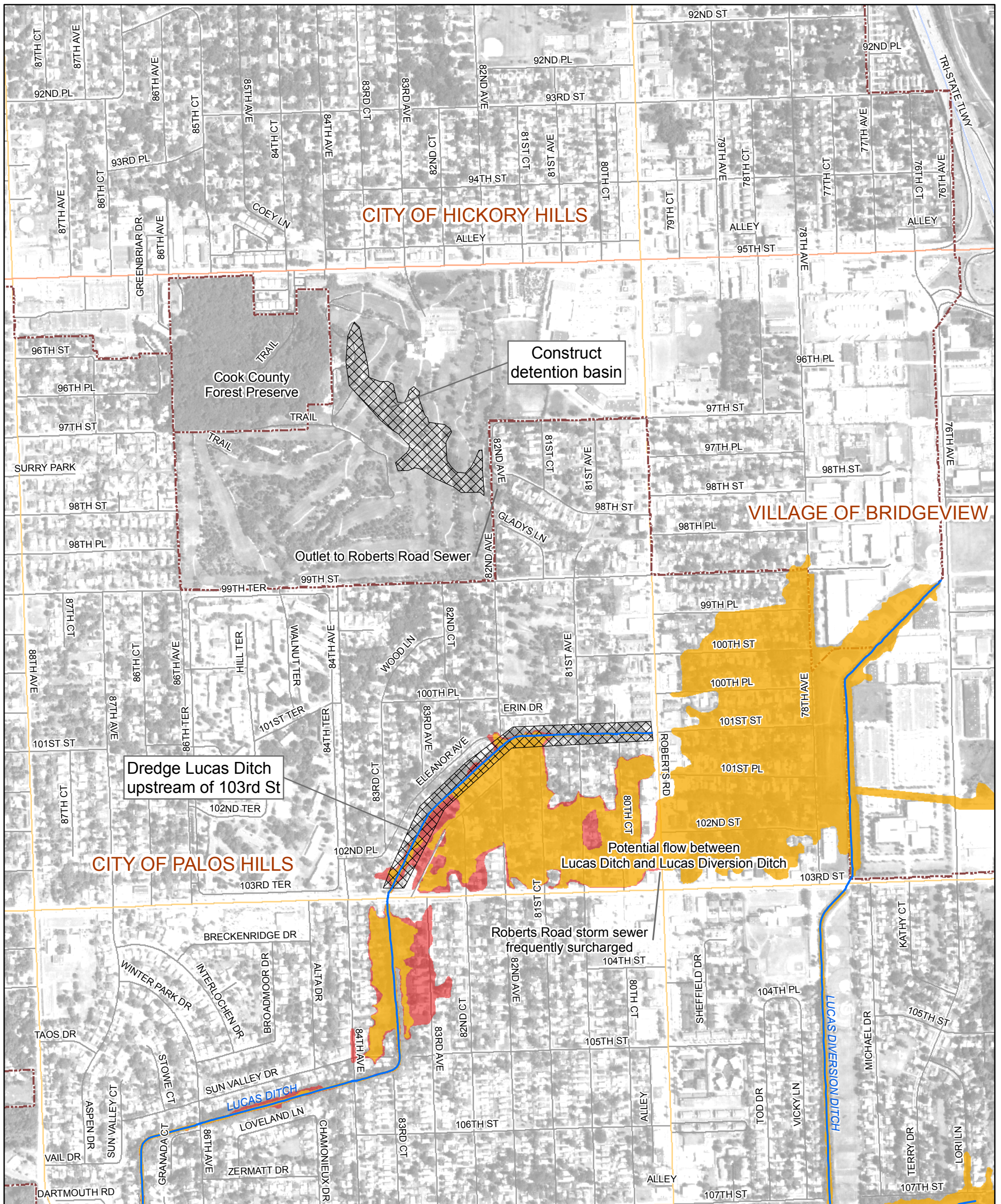
LEGEND

- Project Alternative Location
 - 100-year Inundation Area With Project
 - 100-year Inundation Area Without Project
 - Calumet-Sag Channel
 - Watershed Boundary
- | | |
|----------------|----------------------|
| Roadway | River/Stream |
| Interstate | Municipal Boundary |
| US Highway | Cook County Boundary |
| Major Road | |
| Road | |
- 0 300 600

Feet

Figure 3.18.2
 Lucas Ditch
 Alternative LUDT-5
 Existing and Alternative Inundation Areas
 Calumet-Sag Channel Detailed Watershed Plan





Subwatershed: Lucas Ditch

Alternative: LUDT-7

Alternative Description:

Dredge Lucas Ditch upstream of 103rd street and provide roughly 60 ac-ft of detention on golf course

Conceptual Level Cost: \$ 4,472,600

Benefits: \$ 340,200

B/C Ratio: 0.08

LEGEND

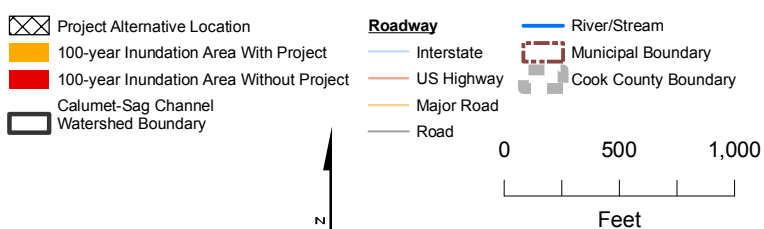
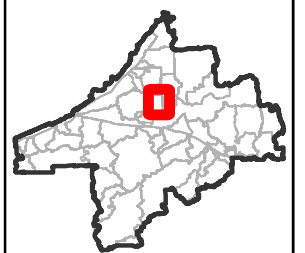
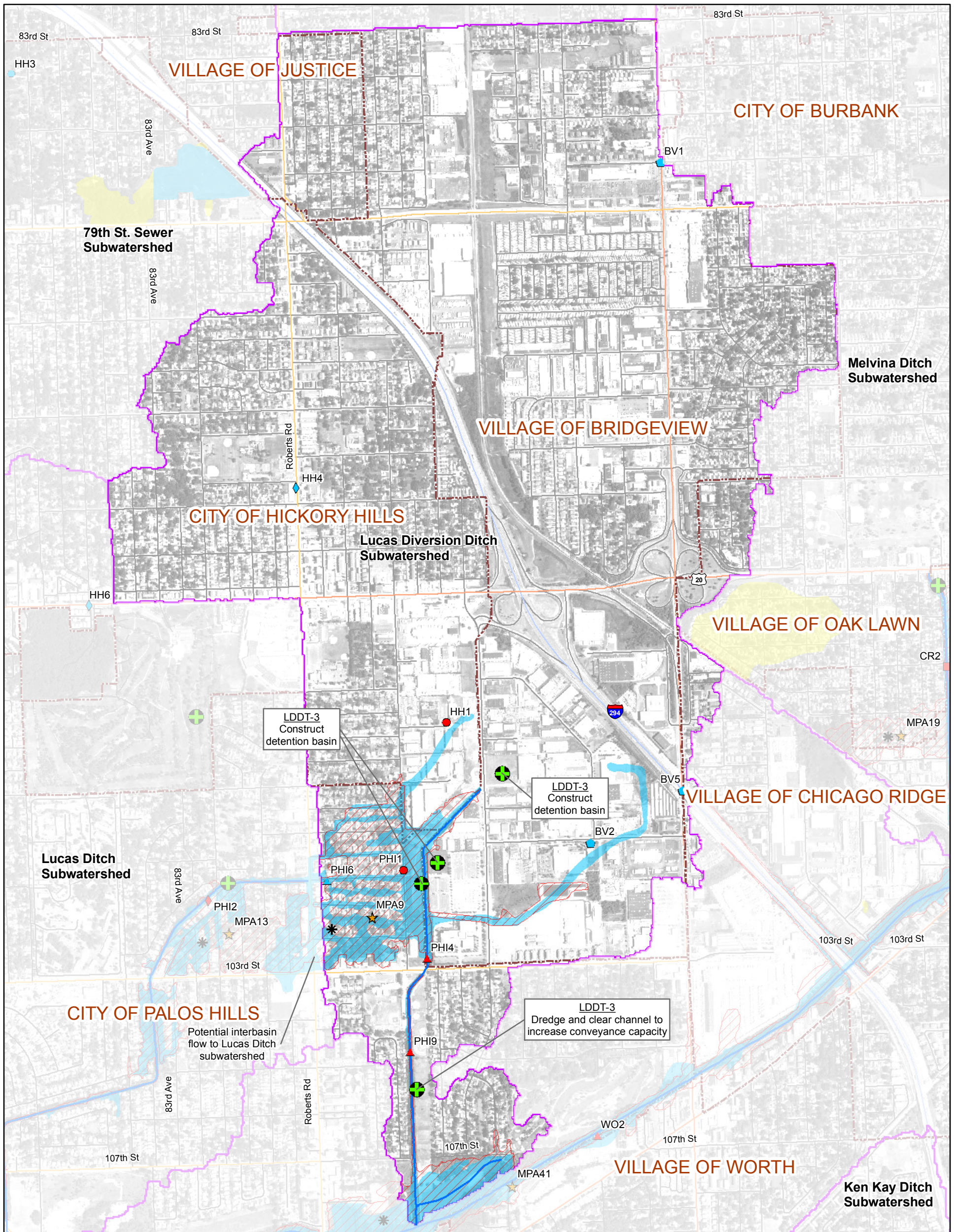


Figure 3.18.3
 Lucas Ditch
 Alternative LUDT-7
 Existing and Alternative Inundation Areas
 Calumet-Sag Channel Detailed Watershed Plan





LEGEND		Problem Type	
Regional	Local	★ Problem Area Identified Through Modeling	FEMA Floodplain
■ Bank Erosion	■ Bank Erosion	⊕ Project Alternative Location	■ Zone A, AH and AO
▲ Maintenance	▲ Maintenance	✱ Candidate Structure(s) for Floodproofing/Acquisition	■ Zone AE
● Overbank Flooding	● Overbank Flooding	▨ DWP 100-year Inundation Area	▭ Calumet-Sag Channel
◆ Pavement Flooding	◆ Pavement Flooding	⊞ Not Modeled in DWP	▭ Watershed Boundary
★ Ponding	★ Ponding		▭ Subwatershed Boundary
◆ Storm Sewer Flow Restriction	◆ Storm Sewer Flow Restriction		▭ River/Stream
			▭ Roadway
			▭ Interstate
			▭ US Highway
			▭ Major Road
			▭ Municipal Boundary
			▭ Cook County Boundary

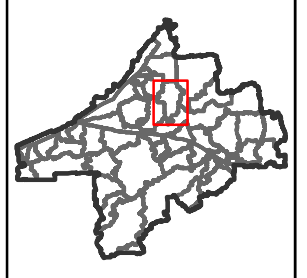
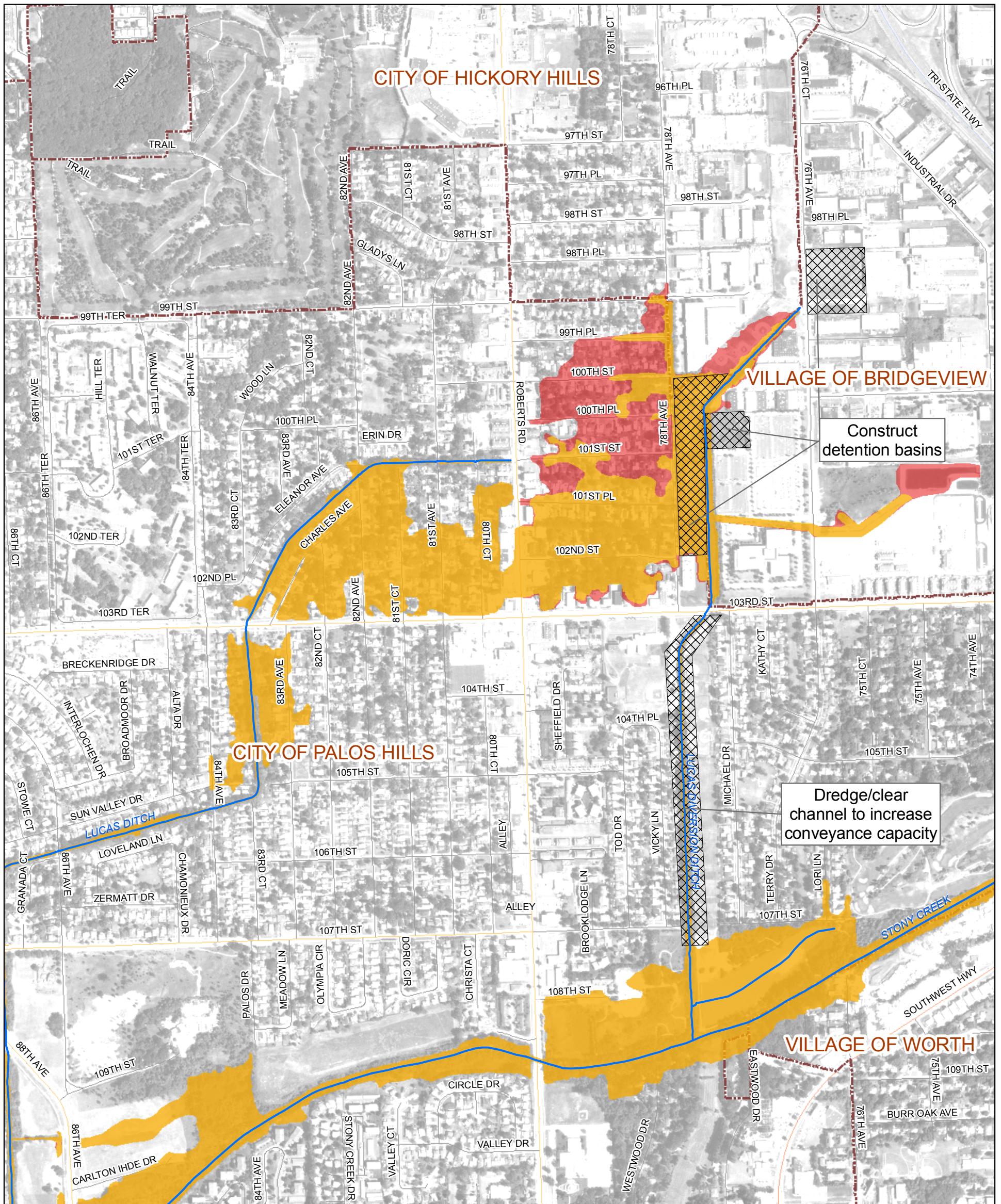


Figure 3.19.1
Tributary Overview: Lucas Diversion Ditch
Calumet-Sag Channel Detailed Watershed Plan



Subwatershed: Lucas Diversion Ditch

Alternative: LDDT-3

Alternative Description:

Construct three detention basins and clear channel

Conceptual Level Cost: \$ 6,765,000

Benefits: \$ 885,200

B/C Ratio: 0.13

LEGEND

- Project Alternative Location
- 100-year Inundation Area With Project
- 100-year Inundation Area Without Project
- Calumet-Sag Channel
- Watershed Boundary
- Roadway**
 - Interstate
 - US Highway
 - Major Road
 - Road
- River/Stream
- Municipal Boundary
- Cook County Boundary

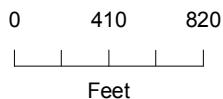
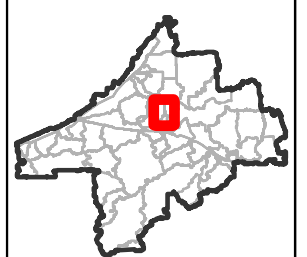
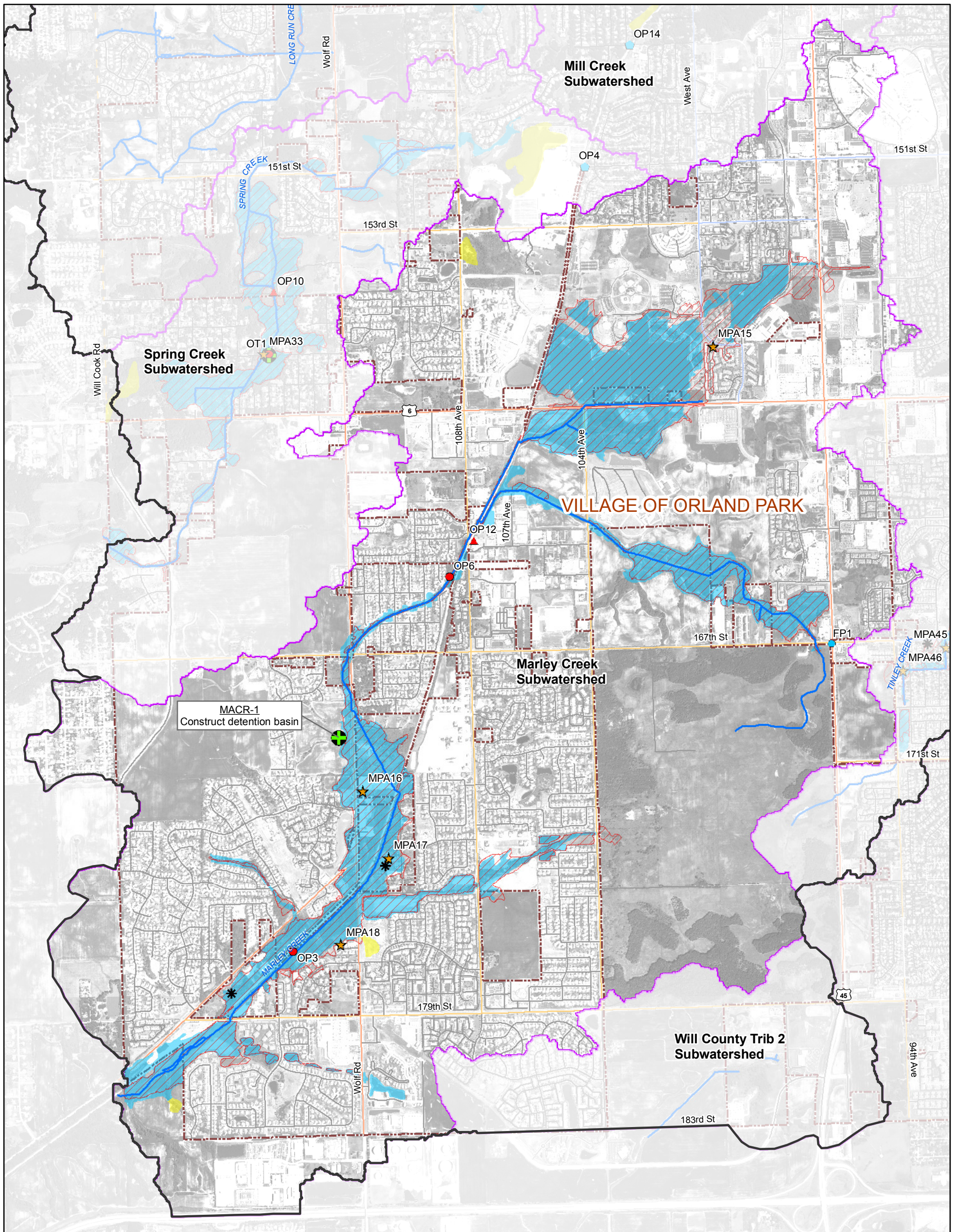


Figure 3.19.2
 Lucas Diversion Ditch
 Alternative LDDT-3
 Existing and Alternative Inundation Areas
 Calumet-Sag Channel Detailed Watershed Plan





LEGEND		Problem Type		FEMA Floodplain		River/Stream	
Regional	Local	★ Problem Area Identified Through Modeling	★ Problem Area Identified Through Modeling	Zone A, AH and AO	Blue line	River/Stream	Blue line
■ Bank Erosion	■ Bank Erosion	⊕ Project Alternative Location	⊕ Project Alternative Location	Zone AE	Blue line	Interstate	Blue line
▲ Maintenance	▲ Maintenance	* Candidate Structure(s) for Floodproofing/Acquisition	* Candidate Structure(s) for Floodproofing/Acquisition	Calumet-Sag Channel Watershed Boundary	Blue line	US Highway	Blue line
● Overbank Flooding	● Overbank Flooding	▨ DWP 100-year Inundation Area	▨ DWP 100-year Inundation Area	Subwatershed Boundary	Blue line	Major Road	Blue line
◆ Pavement Flooding	◆ Pavement Flooding	⊘ Not Modeled in DWP	⊘ Not Modeled in DWP		Blue line	Municipal Boundary	Blue line
★ Ponding	★ Ponding				Blue line	Cook County Boundary	Blue line
◆ Storm Sewer Flow Restriction	◆ Storm Sewer Flow Restriction				Blue line		Blue line

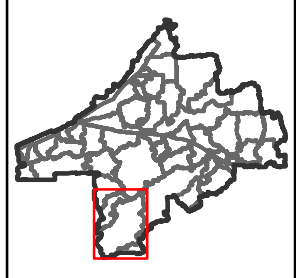
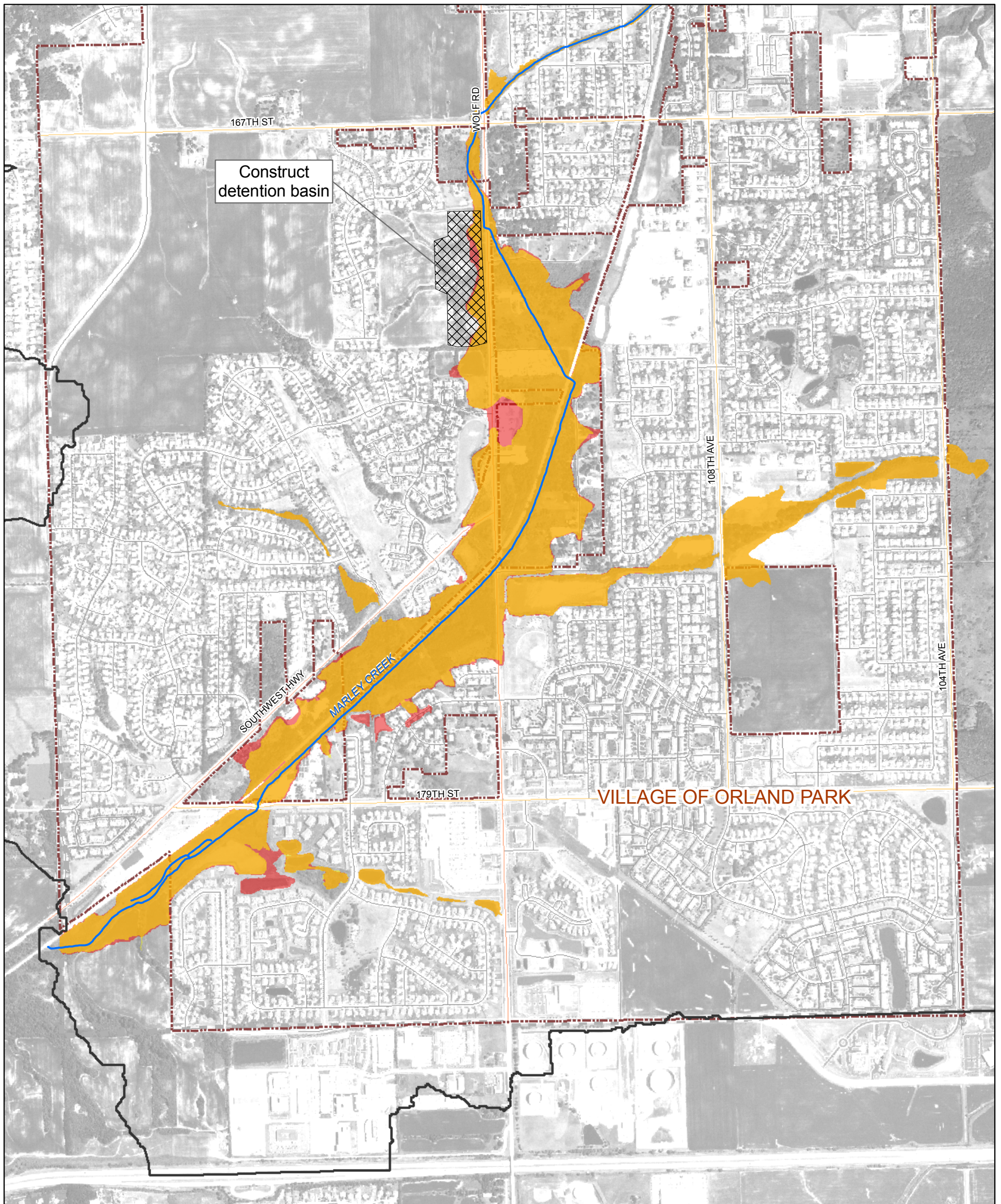


Figure 3.20.1
Tributary Overview: Marley Creek
Calumet-Sag Channel Detailed Watershed Plan



Subwatershed: Marley Creek

Alternative: MACR-1

Alternative Description:

Construct detention basin

Conceptual Level Cost: \$ 15,985,700

Benefits: \$ 160,100

B/C Ratio: 0.01

LEGEND

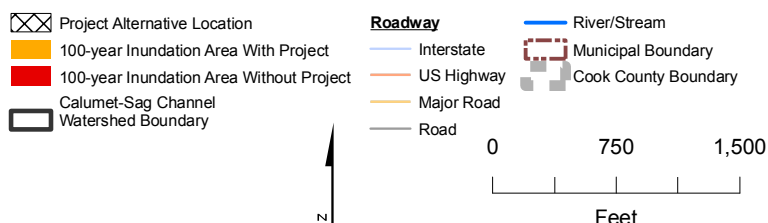
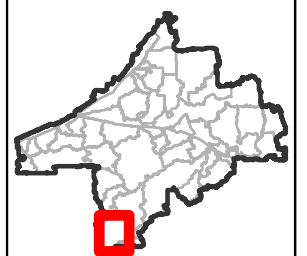
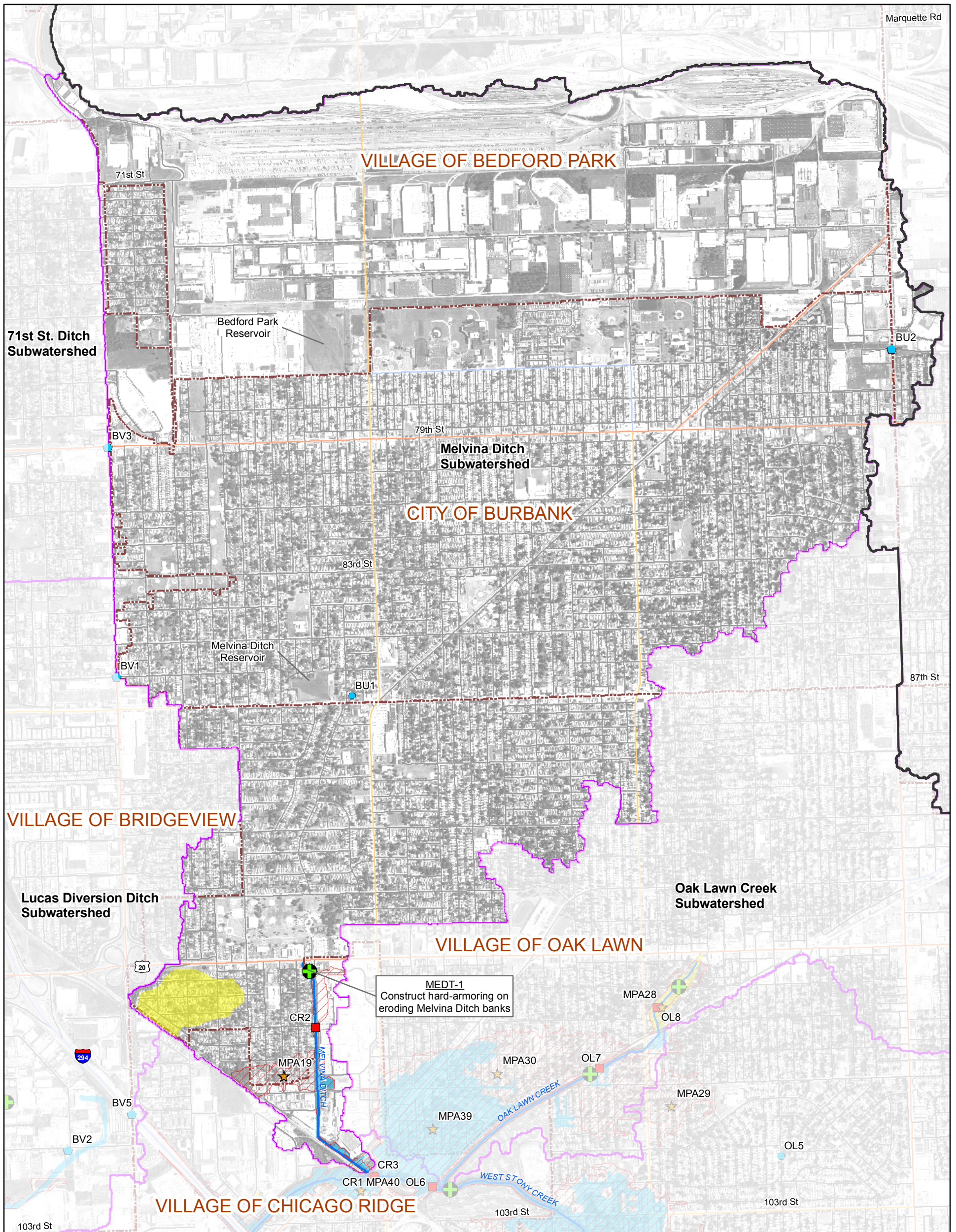


Figure 3.20.2
Marley Creek
Alternative MACR-1
Existing and Alternative Inundation Areas
Calumet-Sag Channel Detailed Watershed Plan





LEGEND

Problem Type		<ul style="list-style-type: none"> ★ Problem Area Identified Through Modeling ⊕ Project Alternative Location * Candidate Structure(s) for Floodproofing/Acquisition ▨ DWP 100-year Inundation Area ⊞ Not Modeled in DWP 	FEMA Floodplain		<ul style="list-style-type: none"> — River/Stream — Roadway — Interstate — US Highway — Major Road — Municipal Boundary — Cook County Boundary
Regional	Local		<ul style="list-style-type: none"> ■ Zone A, AH and AO ■ Zone AE ▭ Calumet-Sag Channel Watershed Boundary ▭ Subwatershed Boundary 		
■ Bank Erosion	■ Bank Erosion				
▲ Maintenance	▲ Maintenance				
● Overbank Flooding	● Overbank Flooding				
◆ Pavement Flooding	◆ Pavement Flooding				
★ Ponding	★ Ponding				
◆ Storm Sewer Flow Restriction	◆ Storm Sewer Flow Restriction				

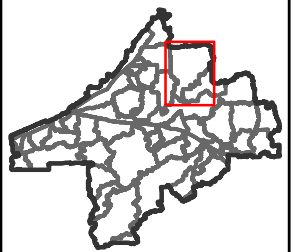
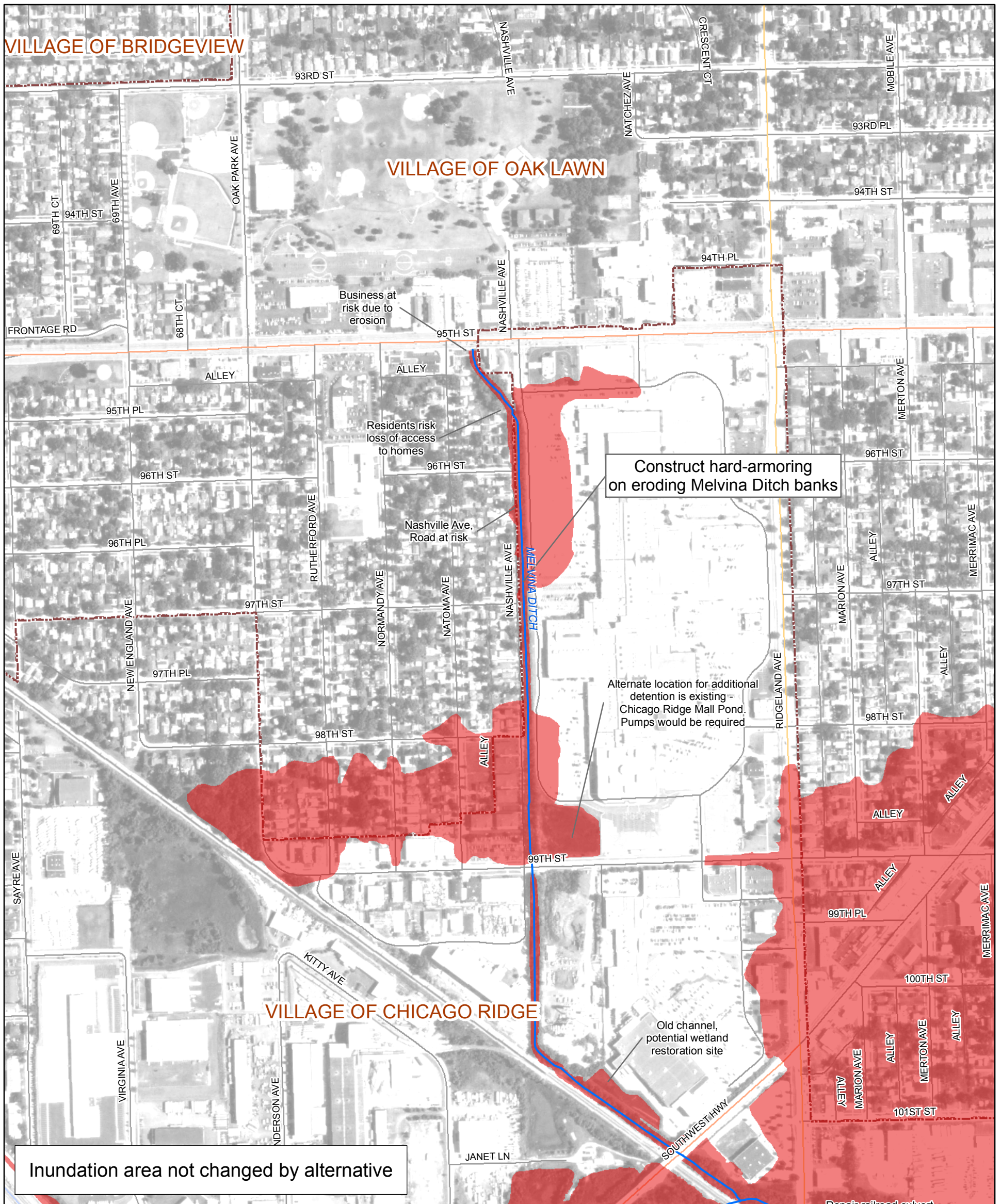


Figure 3.21.1
Tributary Overview: Melvina Ditch
Calumet-Sag Channel Detailed Watershed Plan



Subwatershed: Melvina Ditch

Alternative: MEDT-1

Alternative Description:

Stabilize Melvina Ditch with hard-armoring of eroding streambanks

Conceptual Level Cost: \$ 2,854,500

Benefits: \$ 1,665,900

B/C Ratio: 0.58

LEGEND

- Project Alternative Location
- 100-year Inundation Area With Project
- 100-year Inundation Area Without Project
- Calumet-Sag Channel
- Watershed Boundary
- Roadway**
- Interstate
- US Highway
- Major Road
- Road
- River/Stream
- Municipal Boundary
- Cook County Boundary

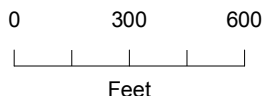
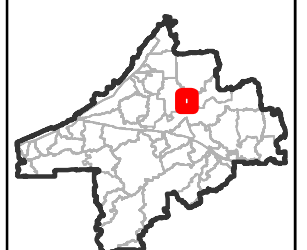


Figure 3.21.4
Melvina Ditch
Alternative MEDT-1
Existing and Alternative Inundation Areas
Calumet-Sag Channel Detailed Watershed Plan



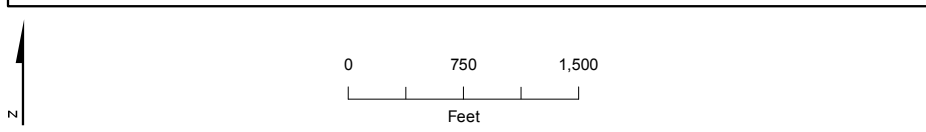
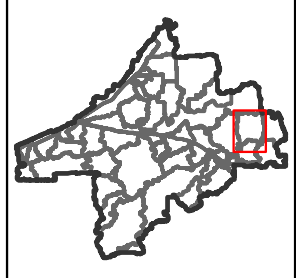
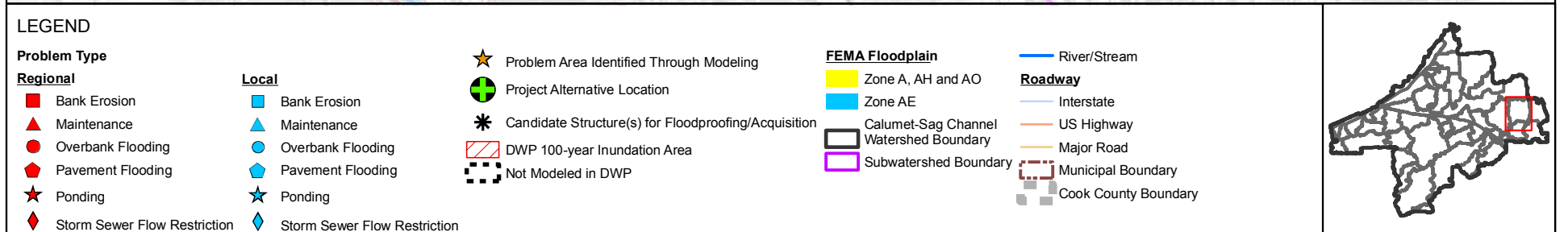
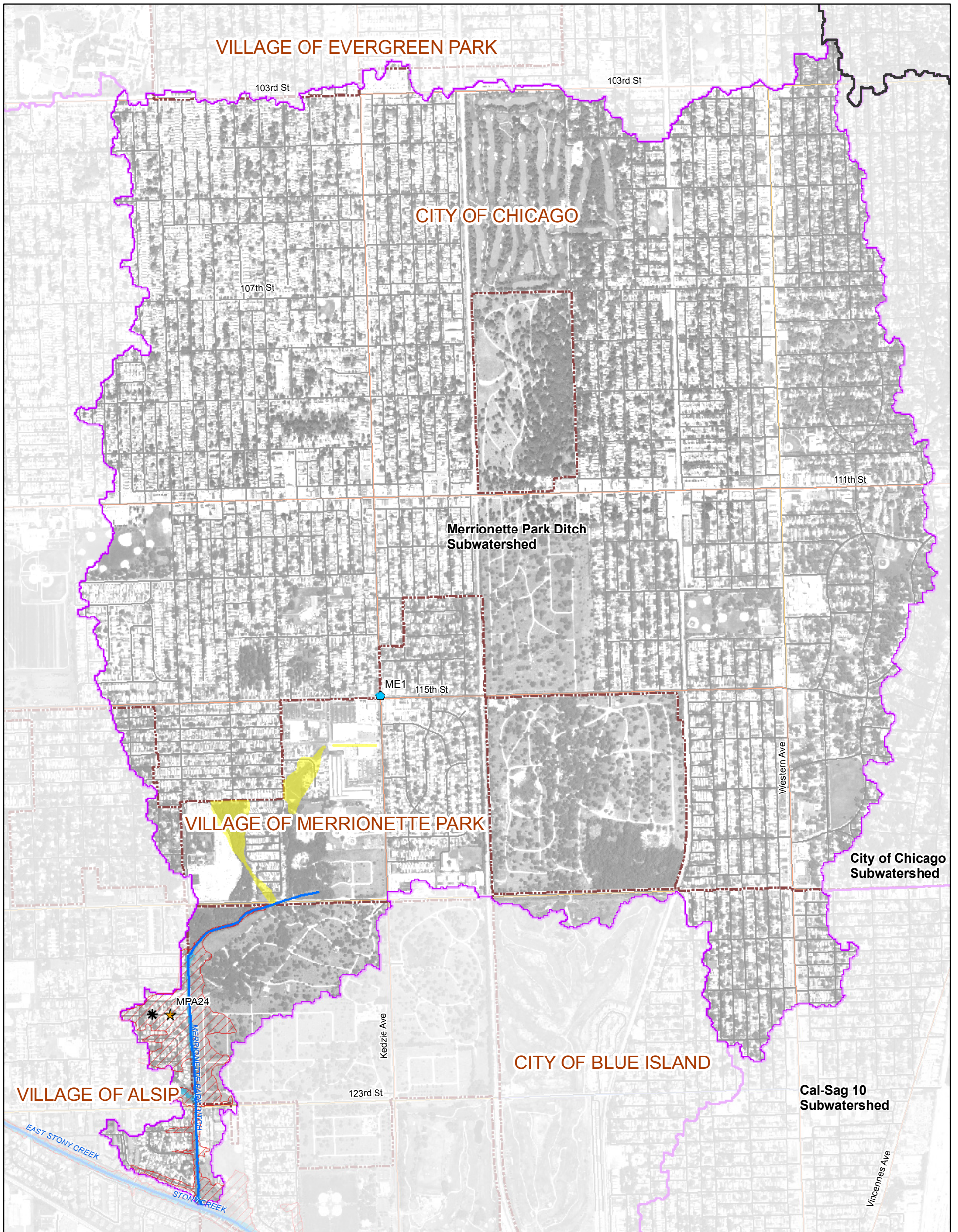


Figure 3.22.1
Tributary Overview: Merrionette Park Ditch
Calumet-Sag Channel Detailed Watershed Plan

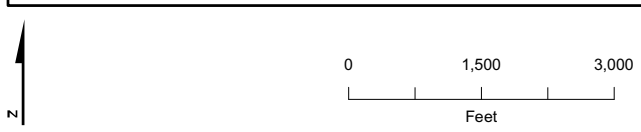
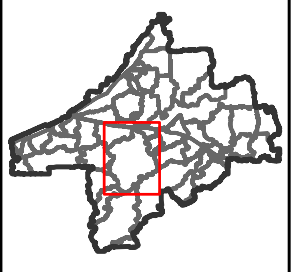
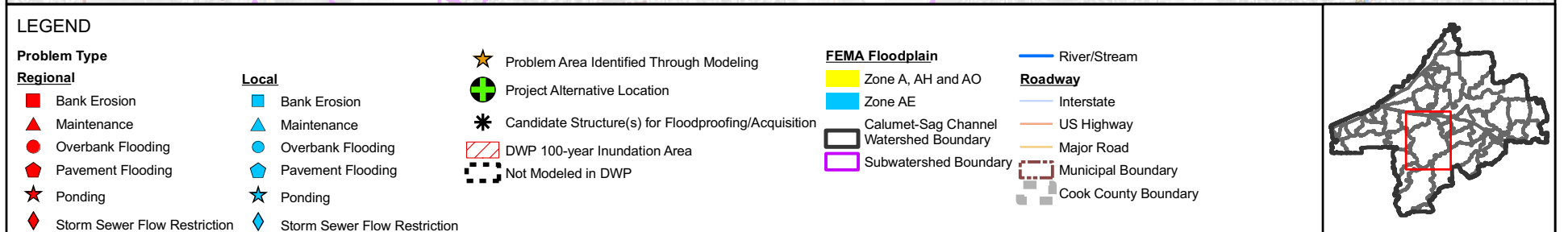
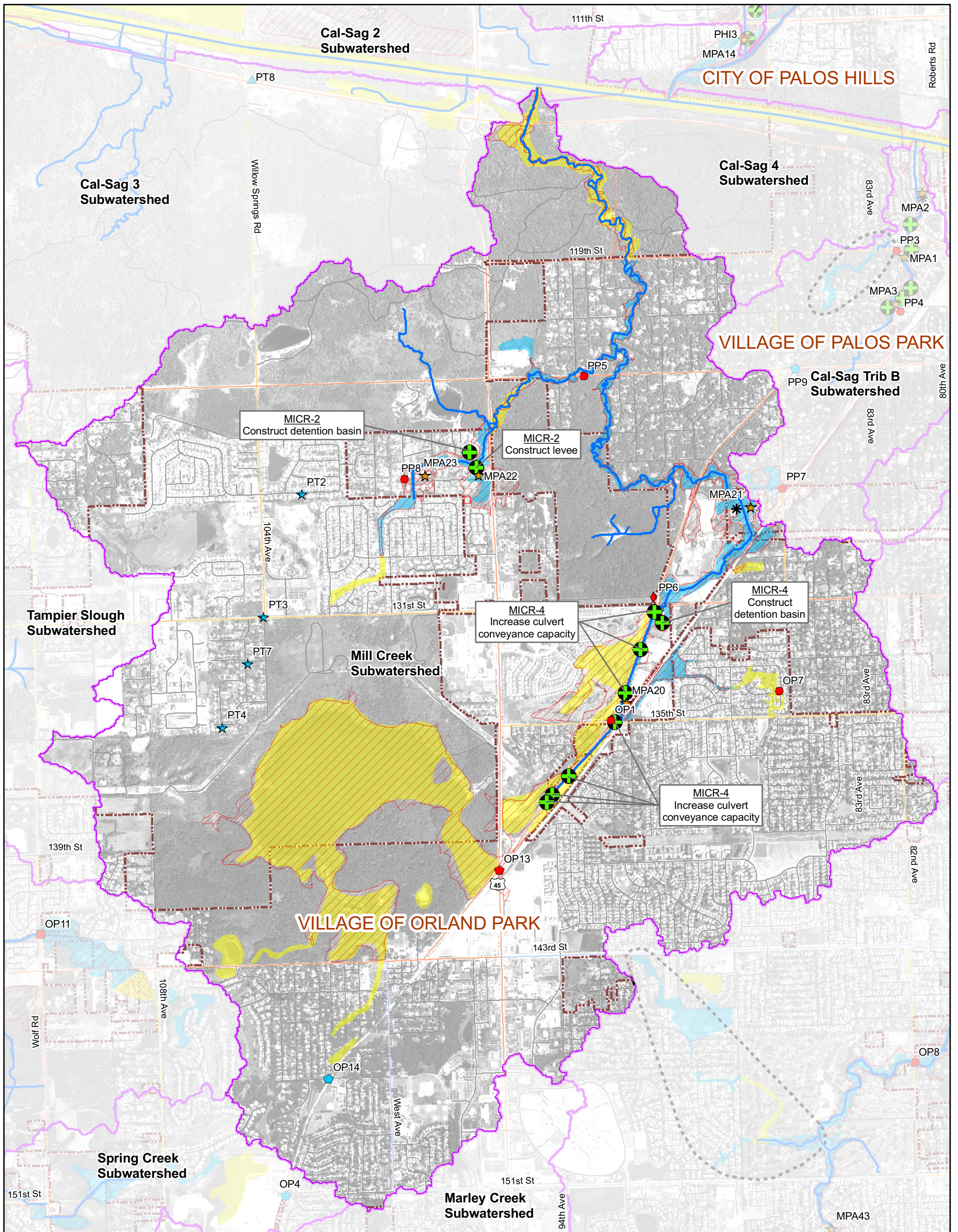
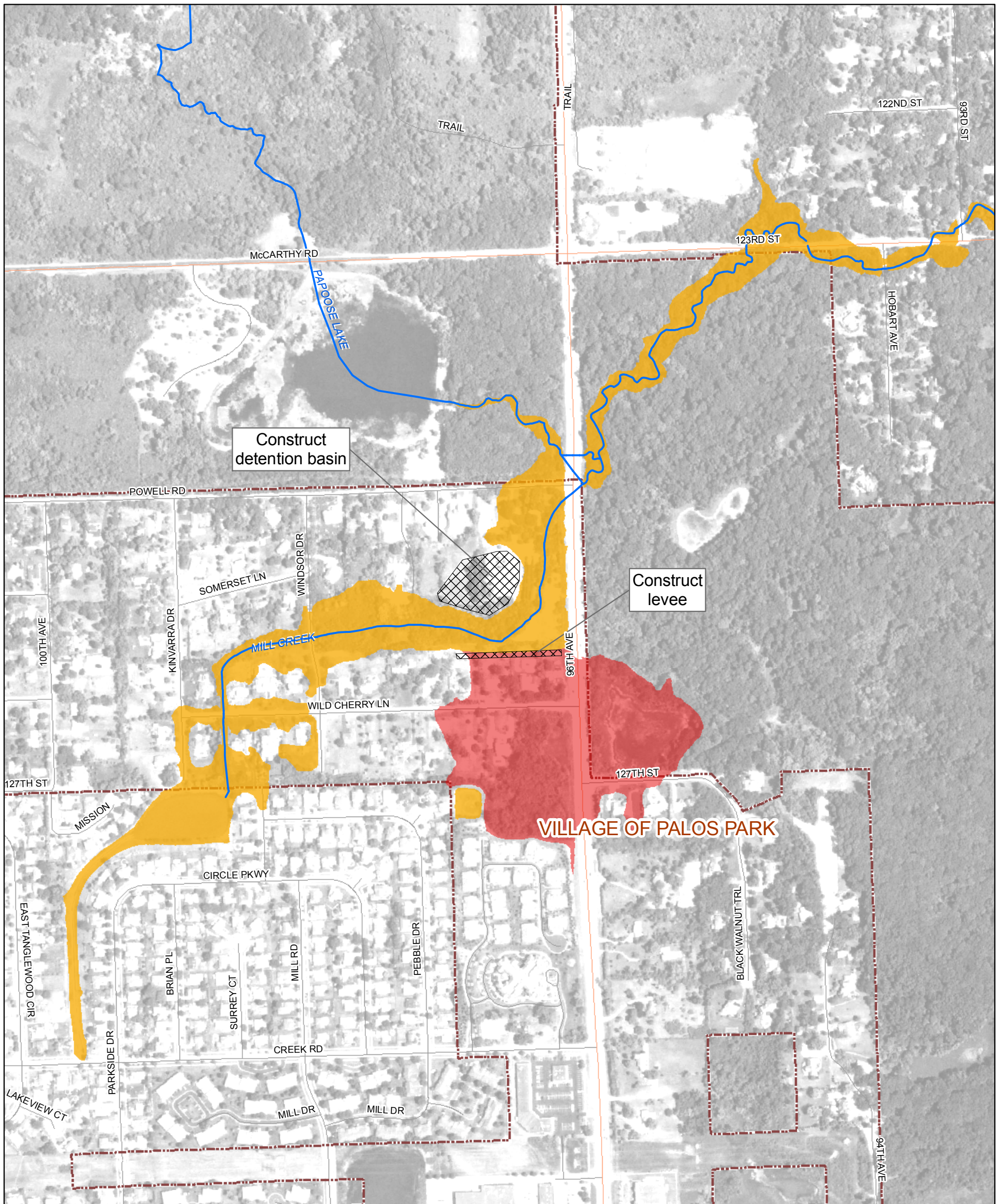


Figure 3.23.1
Tributary Overview: Mill Creek
Calumet-Sag Channel Detailed Watershed Plan



Subwatershed: Mill Creek

Alternative: MICR-2

Alternative Description:

Construct levee and compensatory storage

Conceptual Level Cost: \$ 2,003,400

Benefits: \$ 409,600

B/C Ratio: 0.2

LEGEND

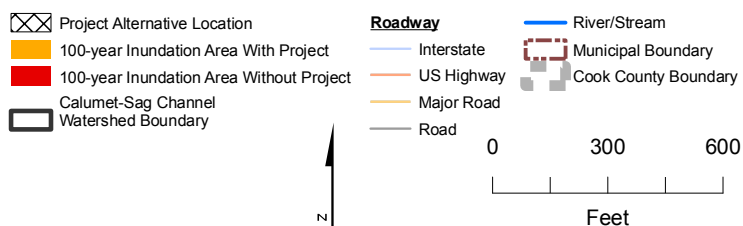
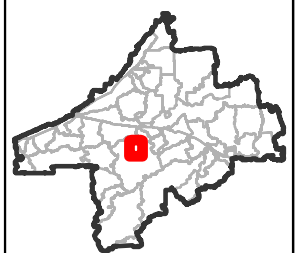
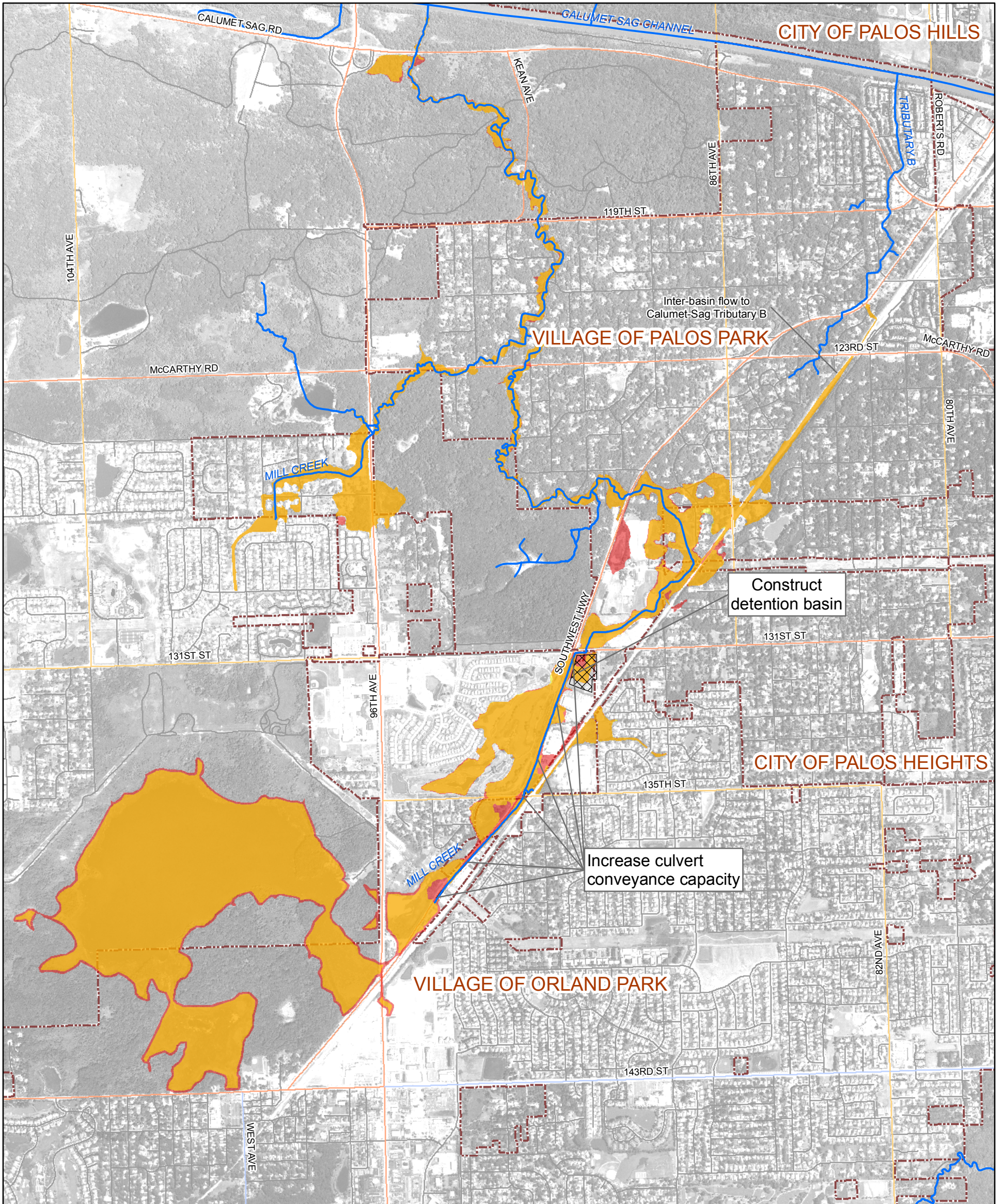


Figure 3.23.2
Mill Creek
Alternative MICR-2
Existing and Alternative Inundation Areas
Calumet-Sag Channel Detailed Watershed Plan





Subwatershed: Mill Creek

Alternative: MICR-4

Alternative Description:

Increase conveyance capacity of seven culverts and construct detention basin

Conceptual Level Cost: \$ 5,918,100

Benefits: \$ 459,000

B/C Ratio: 0.1

LEGEND

- | | | |
|--|------------|----------------------|
| Project Alternative Location | Roadway | River/Stream |
| 100-year Inundation Area With Project | Interstate | Municipal Boundary |
| 100-year Inundation Area Without Project | US Highway | Cook County Boundary |
| Calumet-Sag Channel | Major Road | |
| Watershed Boundary | Road | |

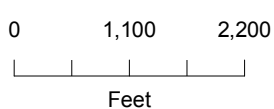


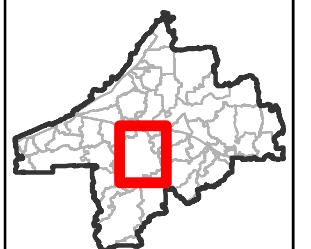
Figure 3.23.3

Mill Creek

Alternative MICR-4

Existing and Alternative Inundation Areas

Calumet-Sag Channel Detailed Watershed Plan



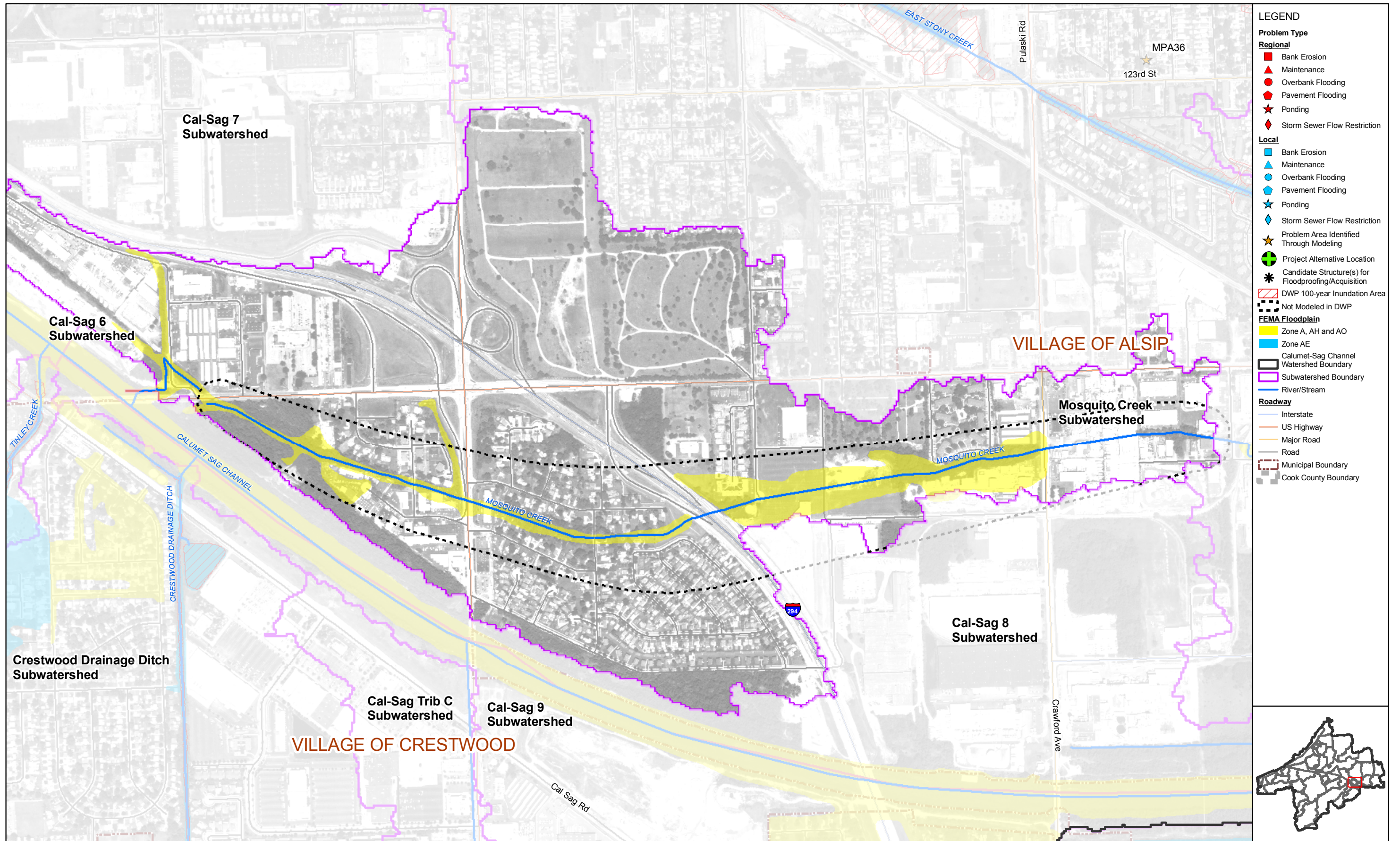


Figure 3.24.1
 Tributary Overview: Mosquito Creek
 Calumet-Sag Channel Detailed Watershed Plan

