

VOLUME 2
Appendix 5-E

REGION 5 NECHES 2023 REGIONAL FLOOD PLAN

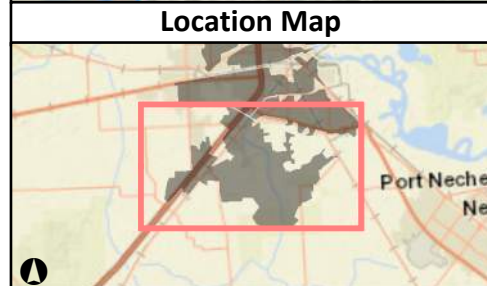
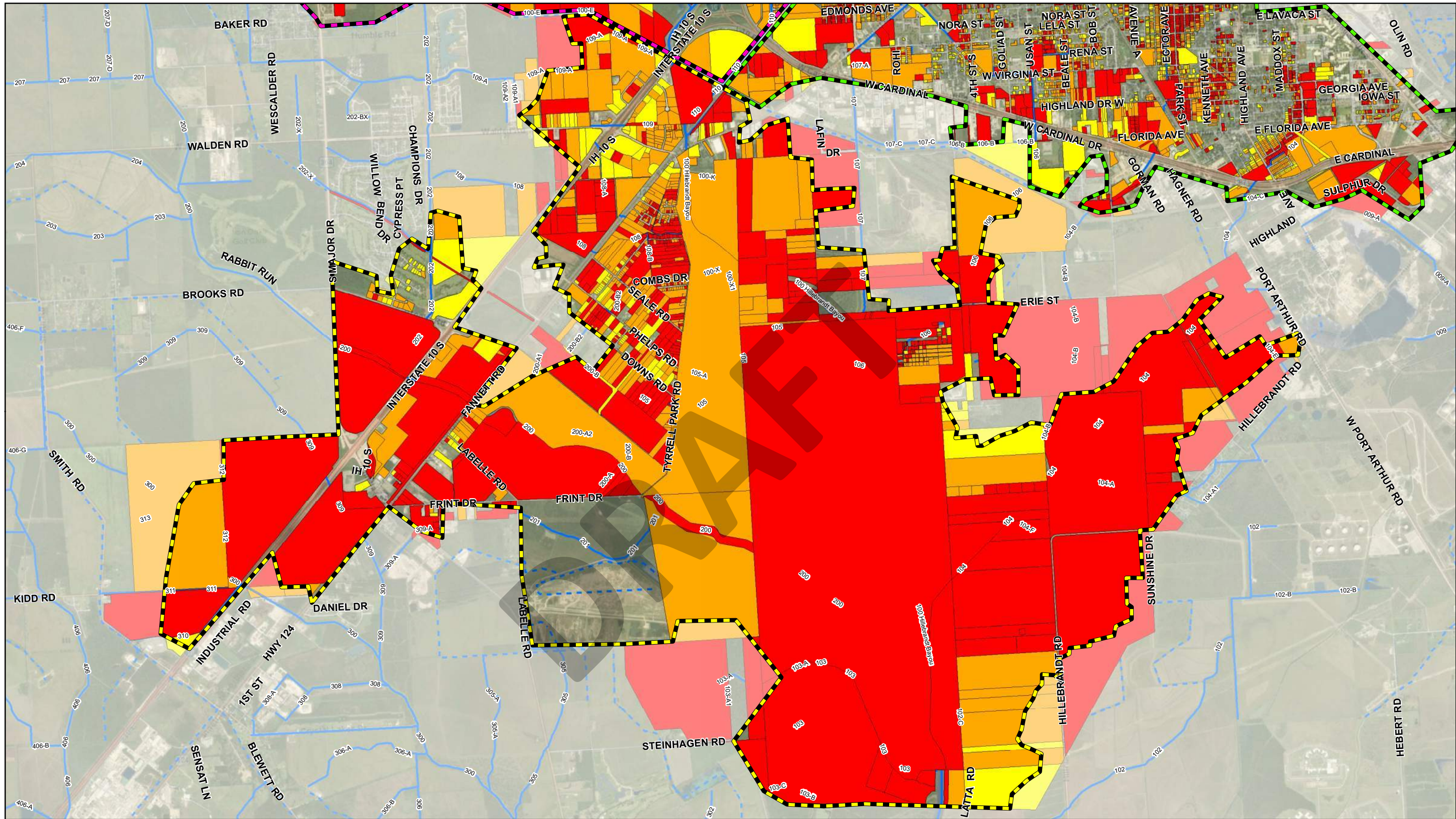
JULY 2023

DRAFT

PREPARED FOR THE
REGION 5 NECHES FLOOD PLANNING GROUP

DRAFT

**APPENDIX 5-E
SUPPORTING DOCUMENTATION FOR RECOMMENDED FLOOD MITIGATION
PROJECTS**



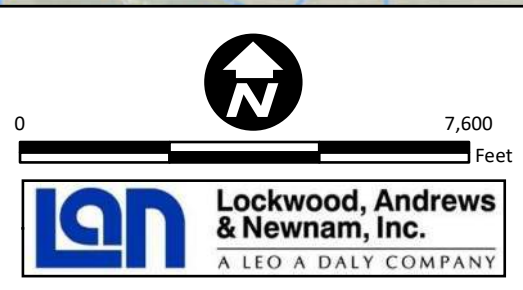
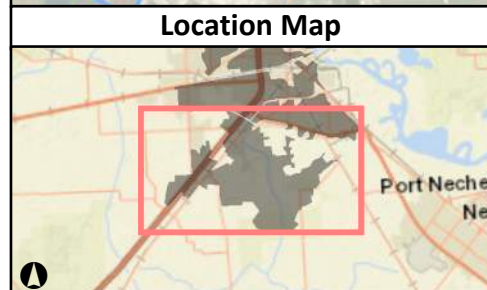
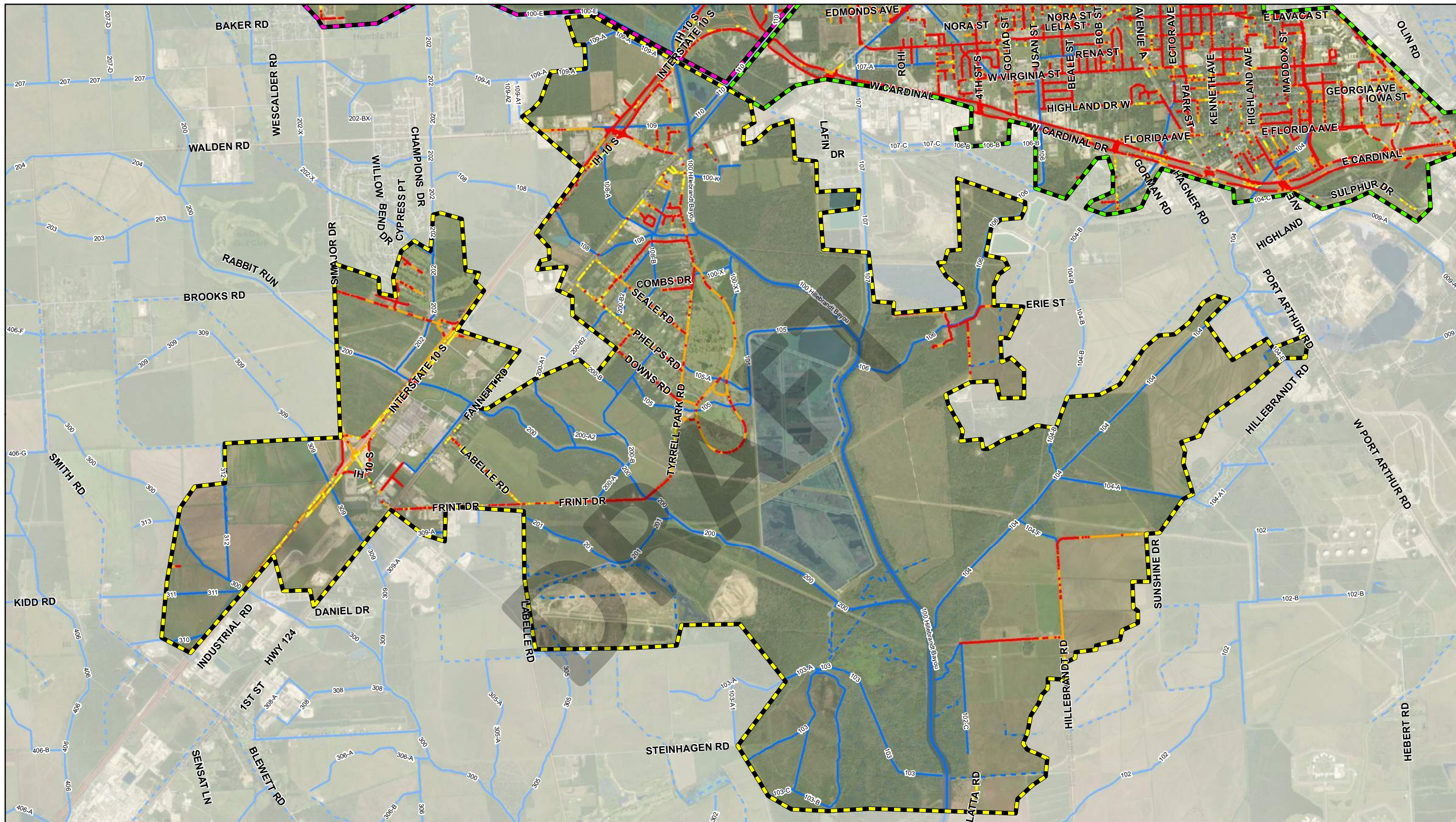
- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

- Legend**
- Existing Parcels in Floodplain**
- 10-Year
 - 100-Year
 - 500-Year
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel

**Existing Parcels in Floodplain
Basins 3-10**



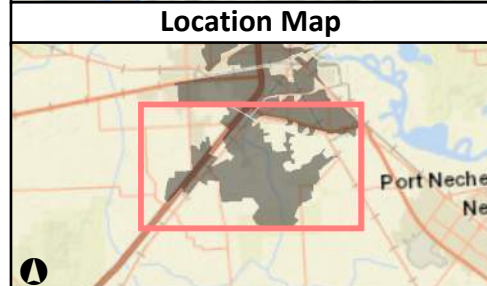
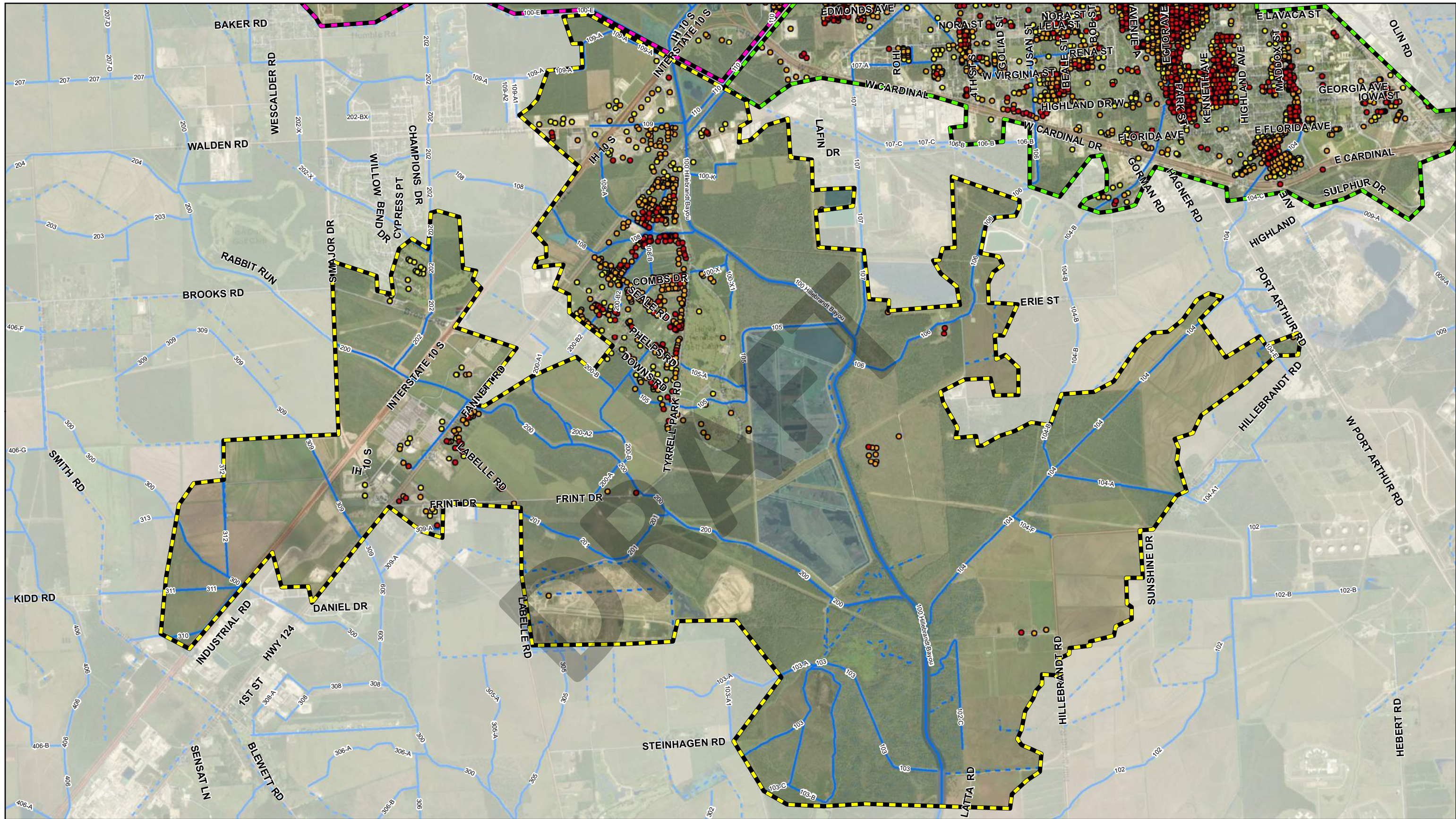
Exhibit # 22



- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion
- Existing Roadway in Floodplain**
- 10-Year
 - 100-Year
 - 500-Year
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel

**Existing Roadway in Floodplain
Basins 3-10**



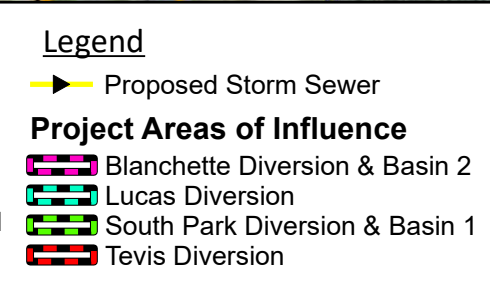
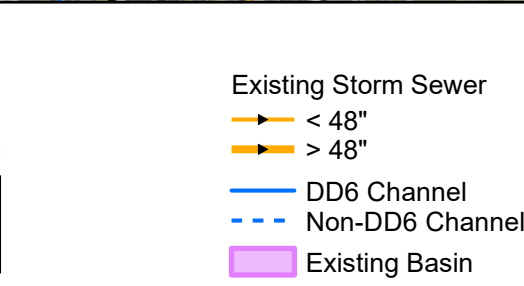
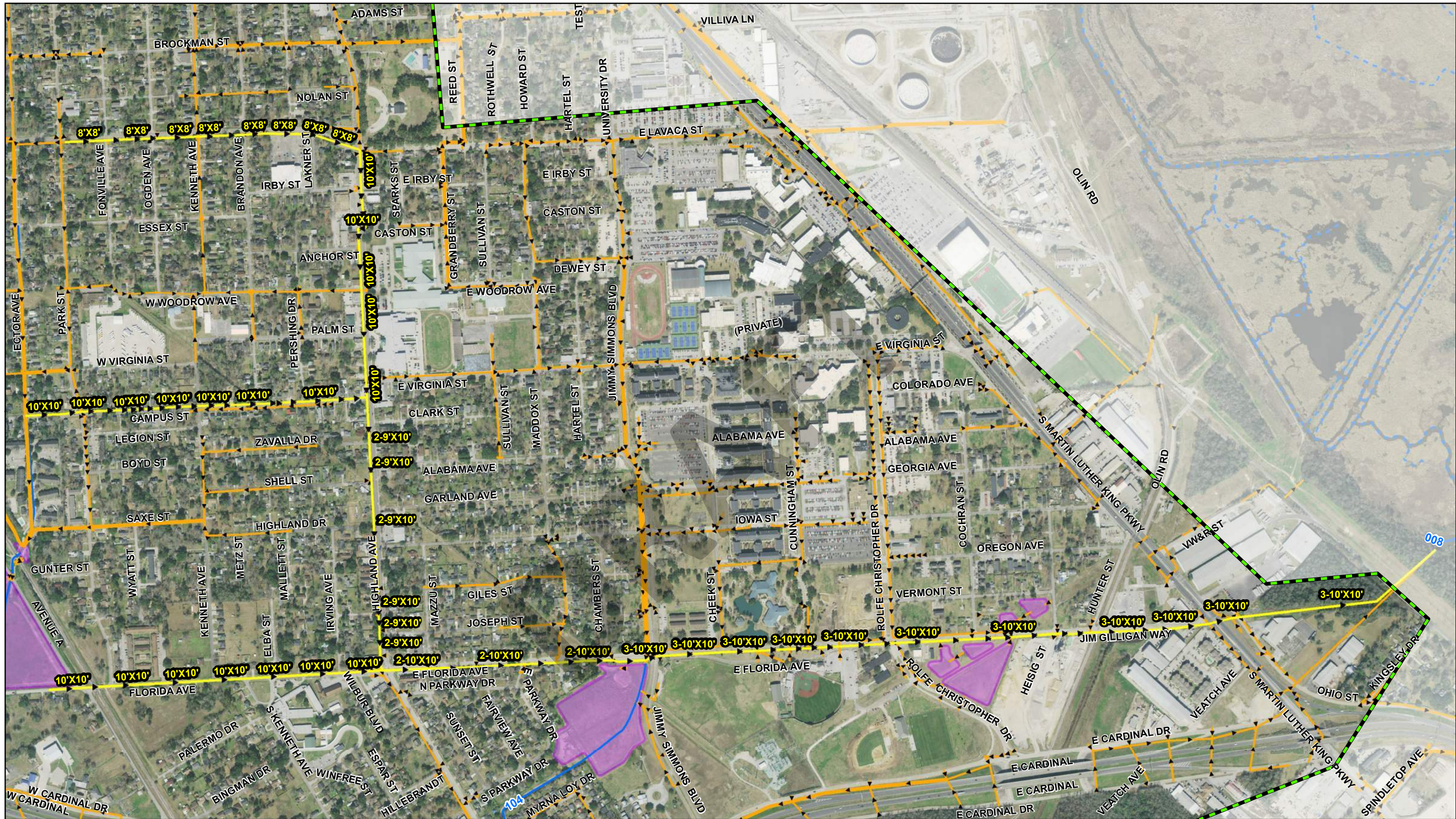


Project Areas of Influence		Existing Inundated Structures	
	Basins 3-10		10-Year
	Blanchette Diversion & Basin 1		100-Year
	Lucas Diversion		500-Year
	South Park Diversion & Basin 2		DD6 Channel
	Tevis Diversion		Non-DD6 Channel
		Open Channels	
			DD6 Channel
			Non-DD6 Channel

Existing Inundated Structures Basins 3-10

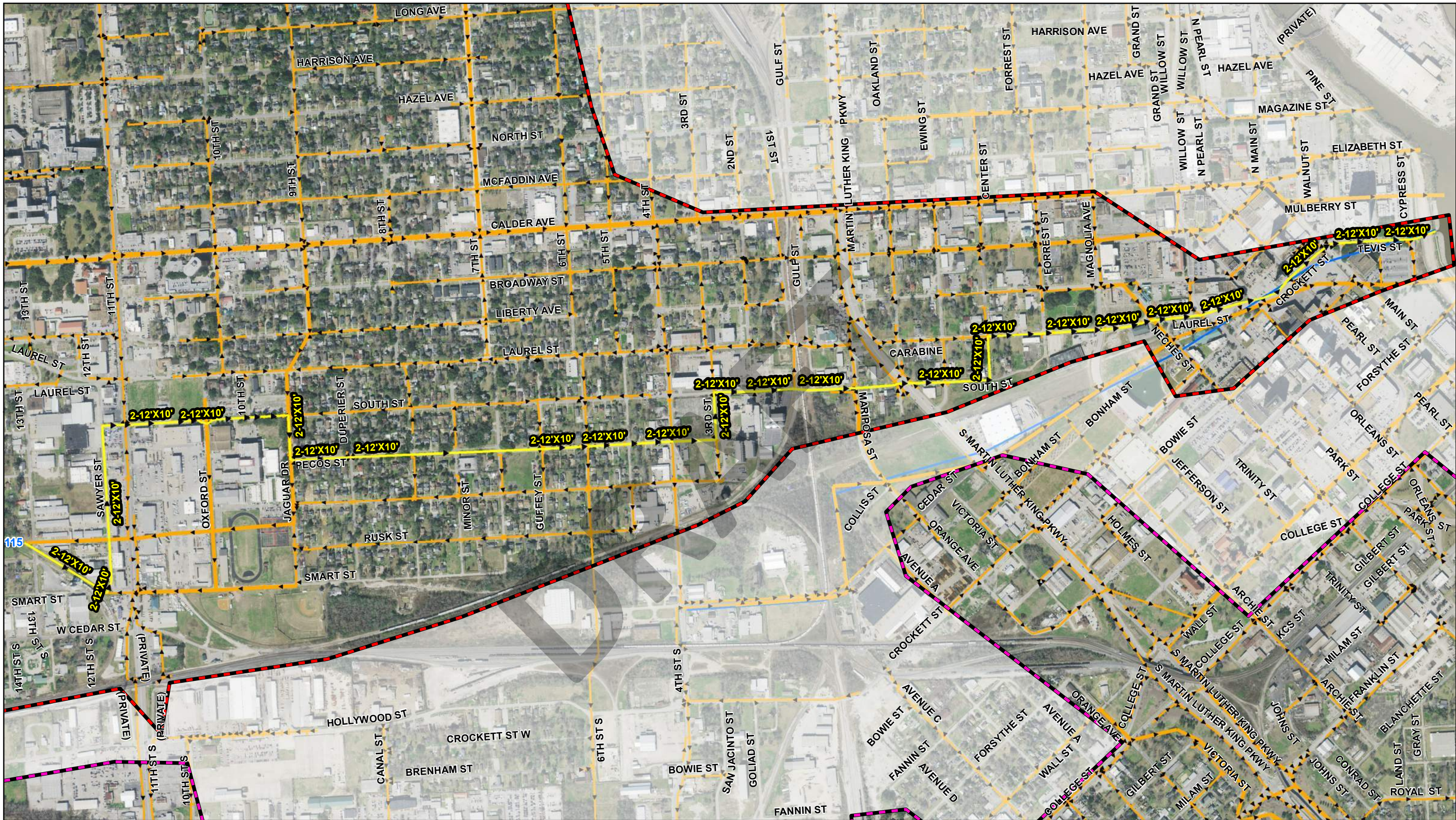


Exhibit # 24



South Park Diversion - Improvement Layout





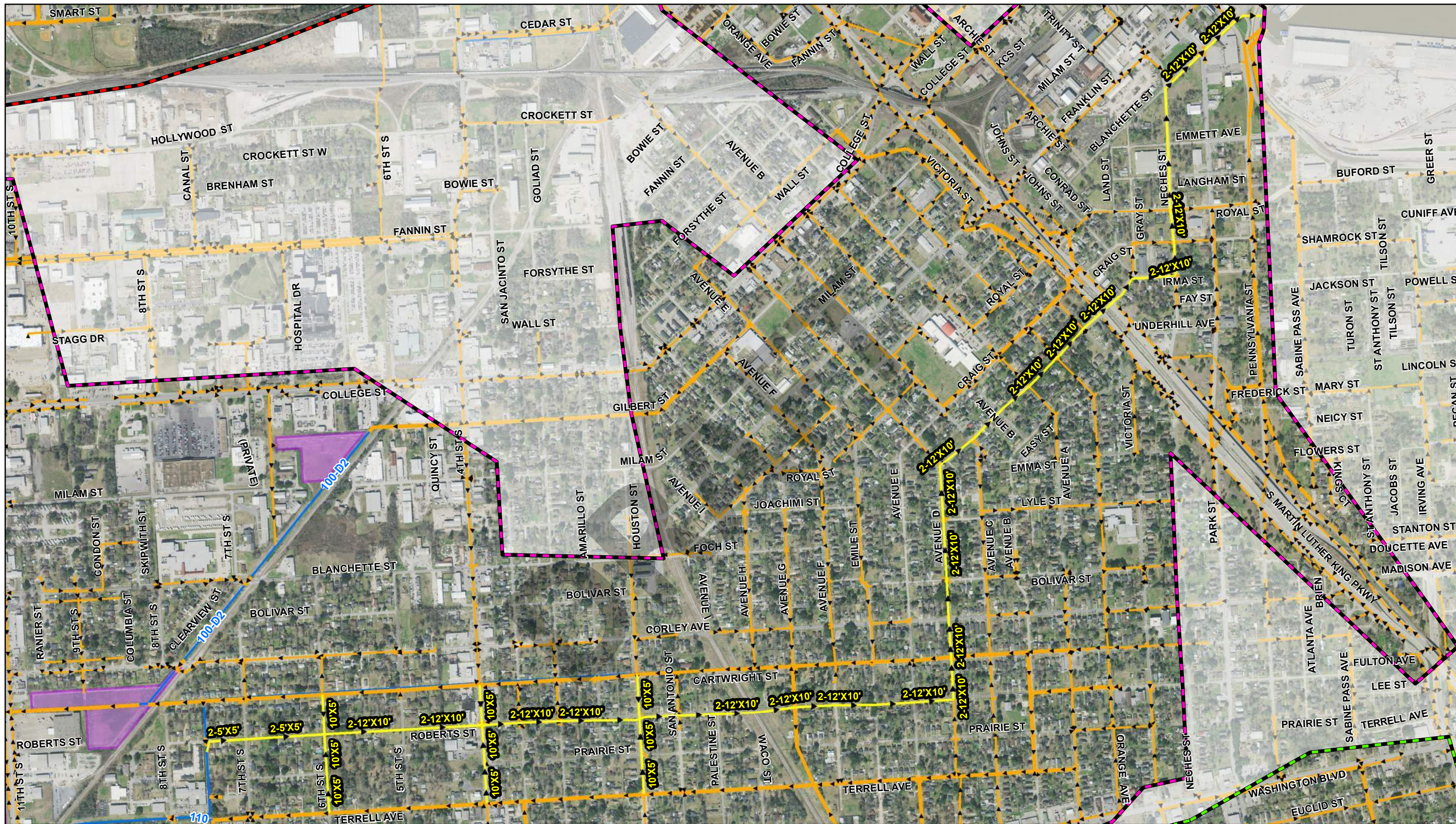
LAN Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

- Existing Storm Sewer**
- < 48"
 - > 48"
 - DD6 Channel
 - Non-DD6 Channel
 - Existing Basin

- Legend**
- Proposed Storm Sewer
 - Blanchette Diversion & Basin 2
 - Lucas Diversion
 - South Park Diversion & Basin 1
 - Tevis Diversion

Tevis Diversion - Improvement Layout





Location Map



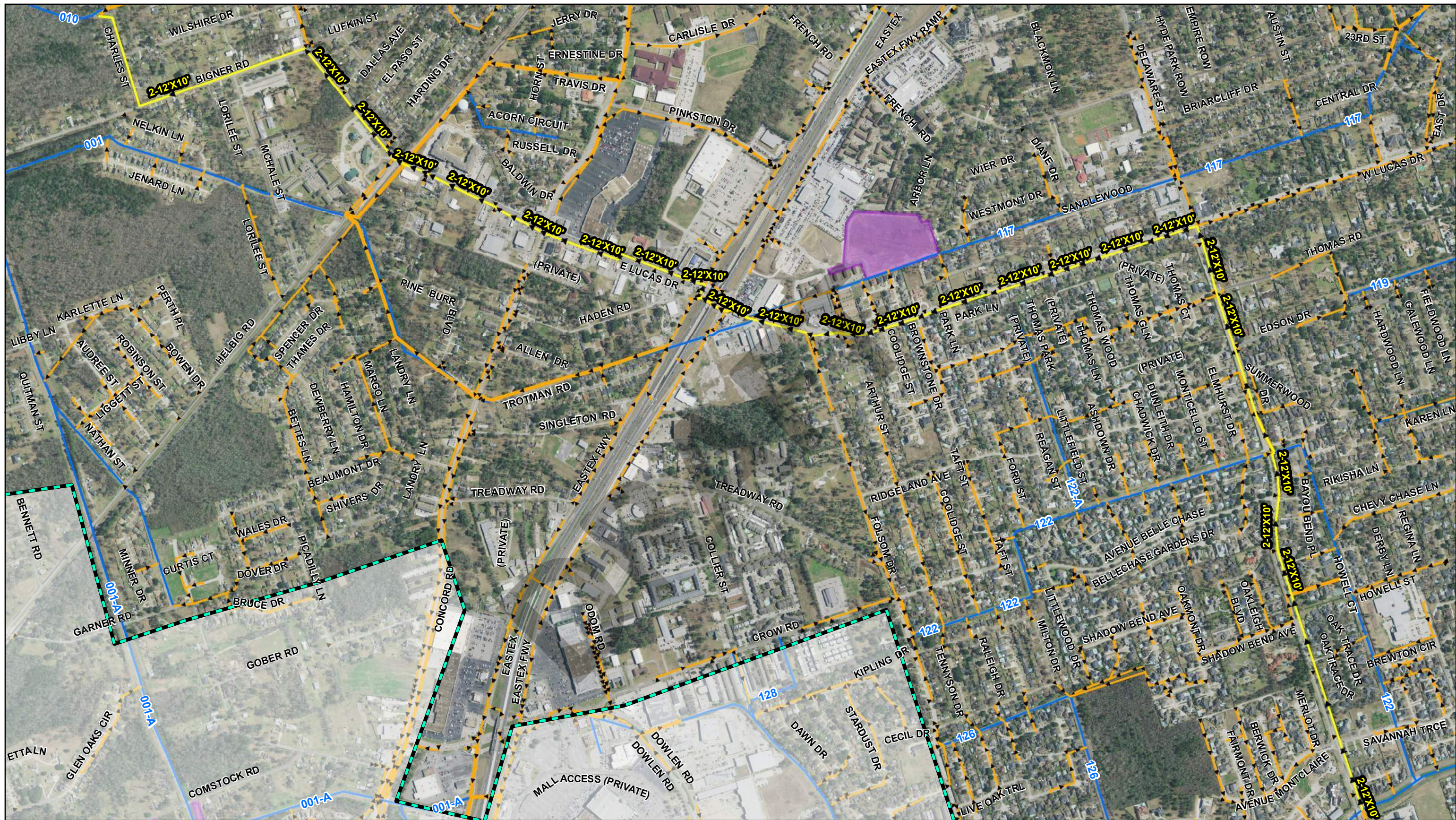
0 1,900 Feet

LAN Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

- Legend**
- Existing Storm Sewer
 - < 48"
 - > 48"
 - Proposed Storm Sewer
 - 2-12"X10"
 - 10"X5"
 - 2-5"X5"
 - DD6 Channel
 - DD6 Channel
 - Non-DD6 Channel
 - Existing Basin
 - Existing Basin
 - Project Areas of Influence
 - Blanchette Diversion & Basin 2
 - Lucas Diversion
 - South Park Diversion & Basin 1
 - Tevis Diversion

Blanchette Diversion - Improvement Layout





LAN Lockwood, Andrews & Newnam, Inc.
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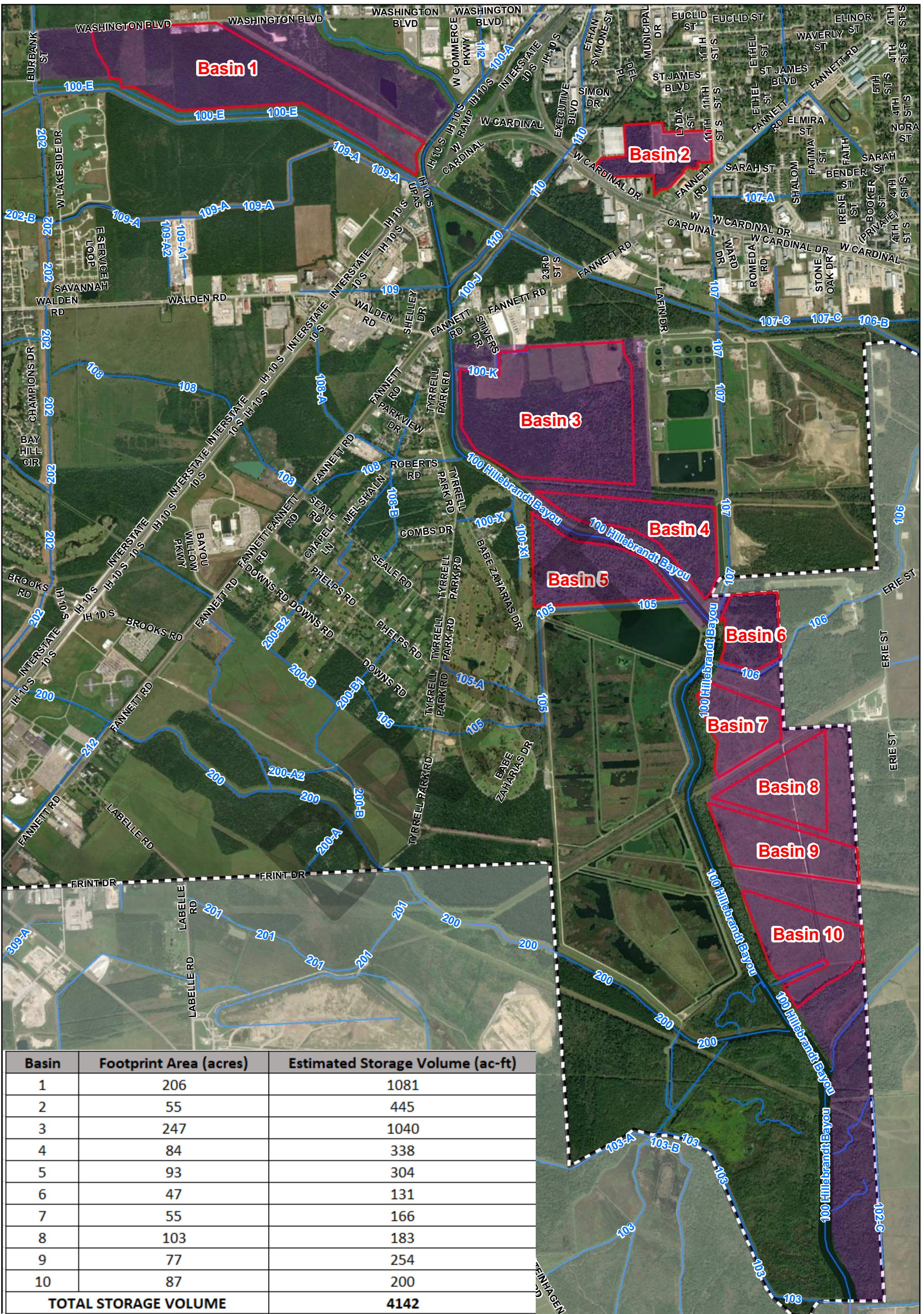
Legend

- Existing Storm Sewer
 - < 48"
 - > 48"
- DD6 Channel
 - DD6 Channel
 - Non-DD6 Channel
- Existing Basin
 - Existing Basin
- Proposed Storm Sewer
 - Proposed Storm Sewer
- Project Areas of Influence
 - Blanchette Diversion & Basin 2
 - Lucas Diversion
 - South Park Diversion & Basin 1
 - Tevis Diversion

Lucas Diversion - Improvement Layout



Exhibit # 28



Basin	Footprint Area (acres)	Estimated Storage Volume (ac-ft)
1	206	1081
2	55	445
3	247	1040
4	84	338
5	93	304
6	47	131
7	55	166
8	103	183
9	77	254
10	87	200
TOTAL STORAGE VOLUME		4142



0 2,000 4,000 Feet



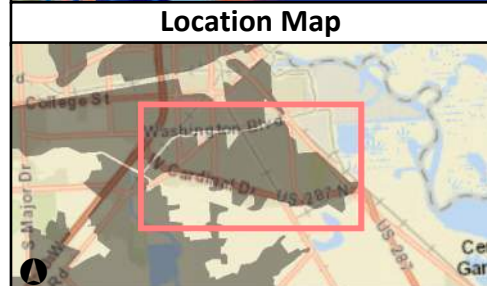
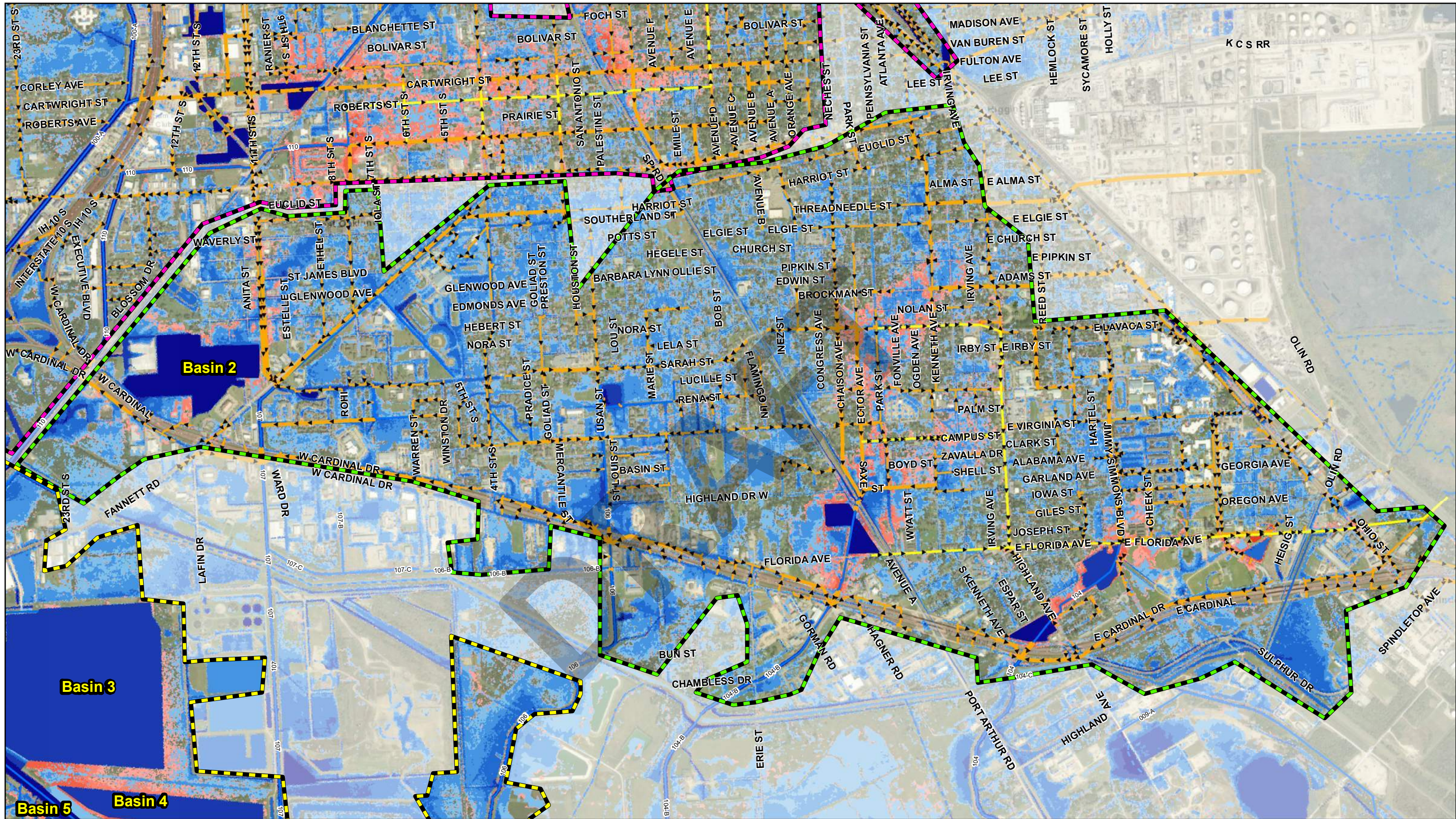
Legend

- Open Channels
- Proposed Detention Basins
- Evaluated Basin Sites
- City Limits

Proposed Detention Basins



Exhibit # 29



- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

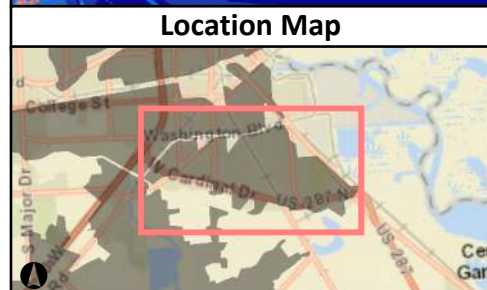
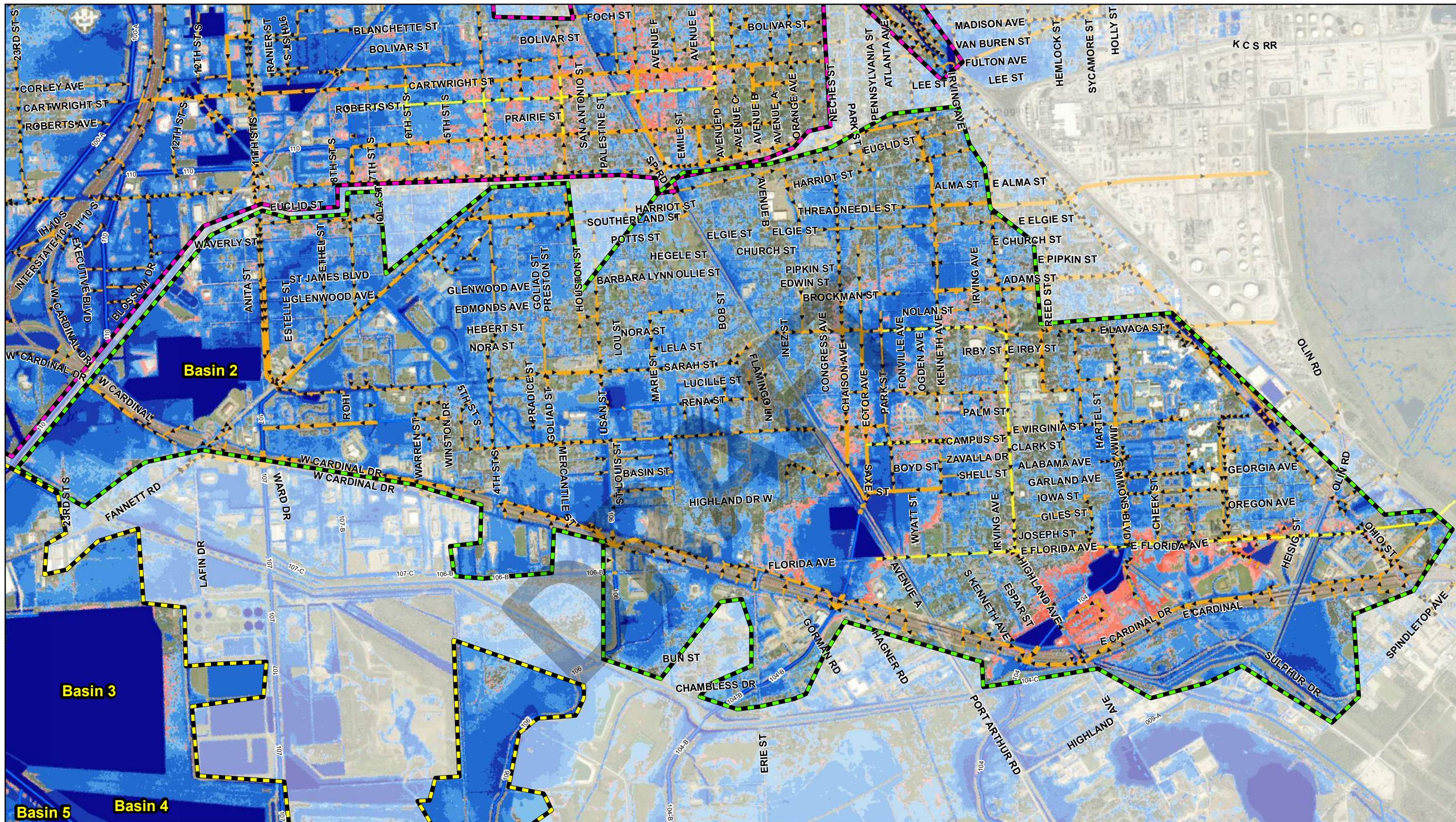
- Legend**
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel
- Existing Storm Sewer**
- < 48"
 - > 48"
- Proposed Storm Sewer**
- Proposed Storm Sewer

- Proposed 10-YR Ponding**
- 0.25 - 0.50
 - 0.50 - 1.0
 - 1.0 - 2.0
 - 2.0 - 5.0
 - > 5.0
 - Existing 10-YR Ponding

10-Year Proposed Ponding South Park Diversion & Basin 2



Exhibit # 30



- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

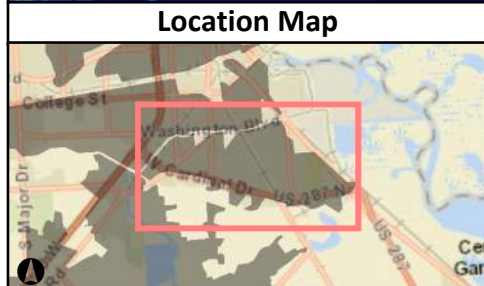
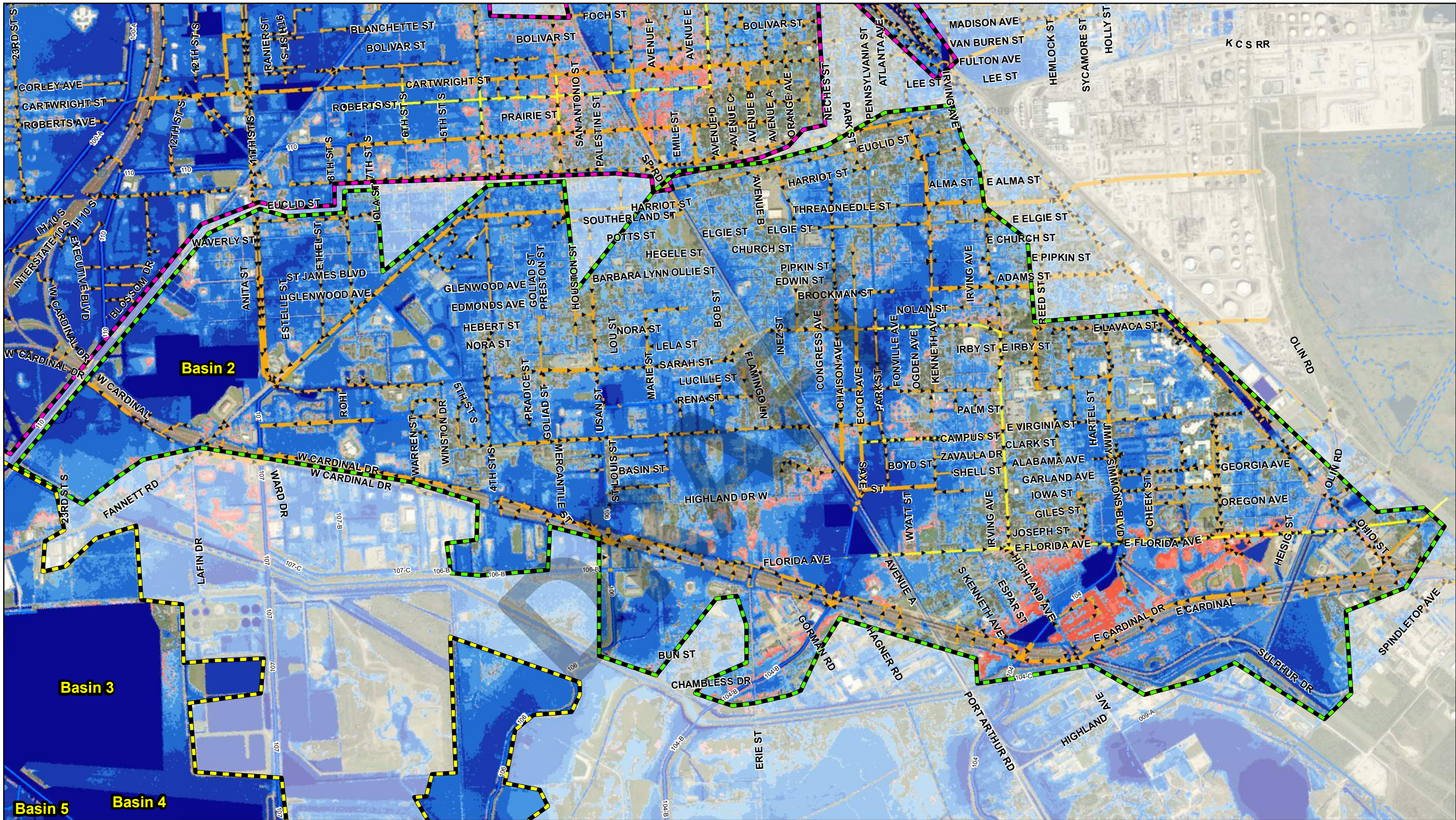
- Legend**
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel
- Existing Storm Sewer**
- < 48"
 - > 48"
- Proposed Storm Sewer**
- Proposed Storm Sewer

- Proposed 100-YR Ponding**
- 0.25 - 0.50
 - 0.50 - 1.0
 - 1.0 - 2.0
 - 2.0 - 5.0
 - > 5.0
- Existing 100-YR Ponding

100-Year Proposed Ponding South Park Diversion & Basin 2



Exhibit # 31



0 4,000 Feet

- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

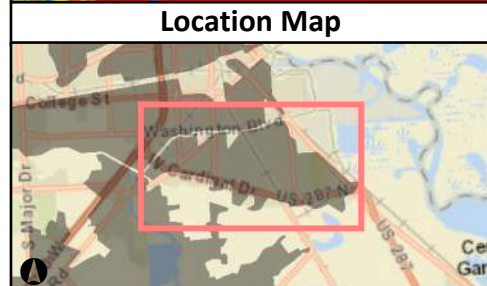
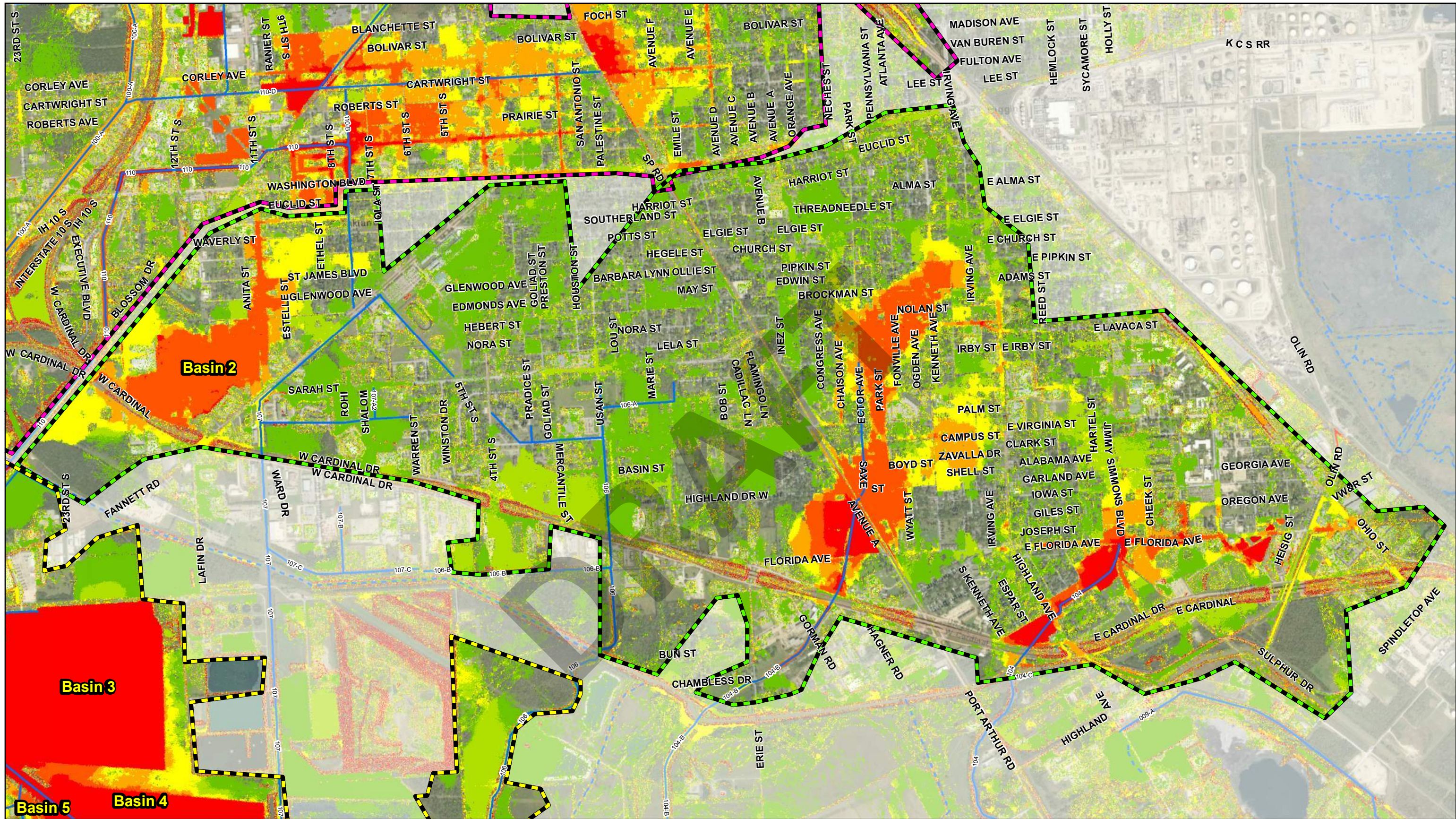
- Legend**
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel
- Existing Storm Sewer**
- < 48"
 - > 48"
- Proposed Storm Sewer**
- Proposed Storm Sewer

- Proposed 500-YR Ponding**
- 0.25 - 0.50
 - 0.50 - 1.0
 - 1.0 - 2.0
 - 2.0 - 5.0
 - > 5.0
 - Existing 500-YR Ponding

500-Year Proposed Ponding South Park Diversion & Basin 2

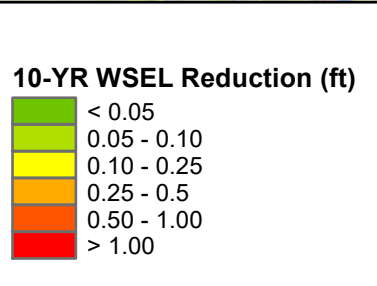


Exhibit # 32



- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

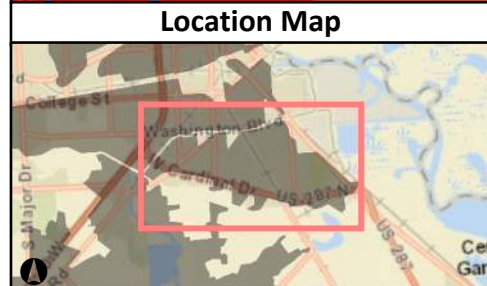
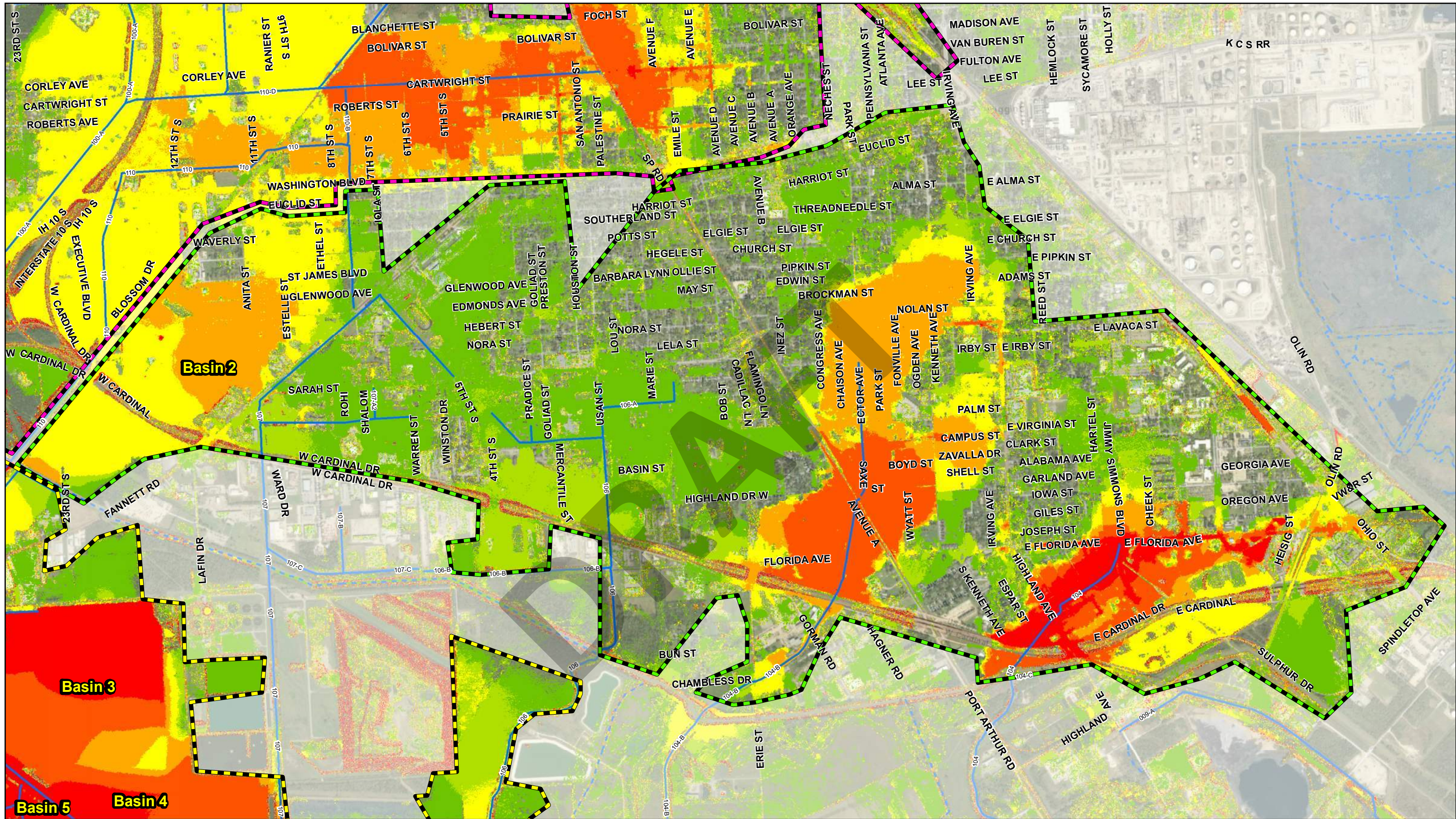
- Legend**
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel



10-Year WSEL Reductions South Park Diversion & Basin 2

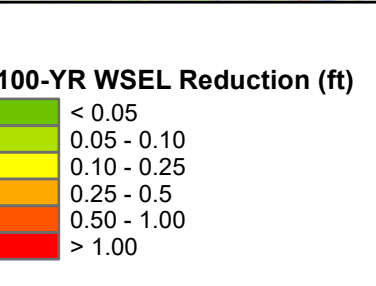


Exhibit # 33



- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

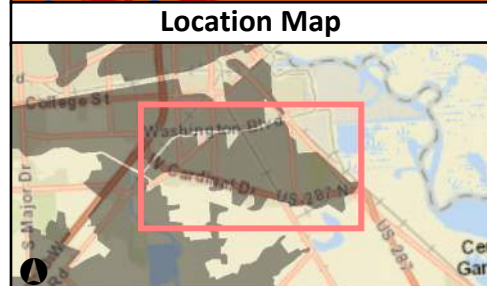
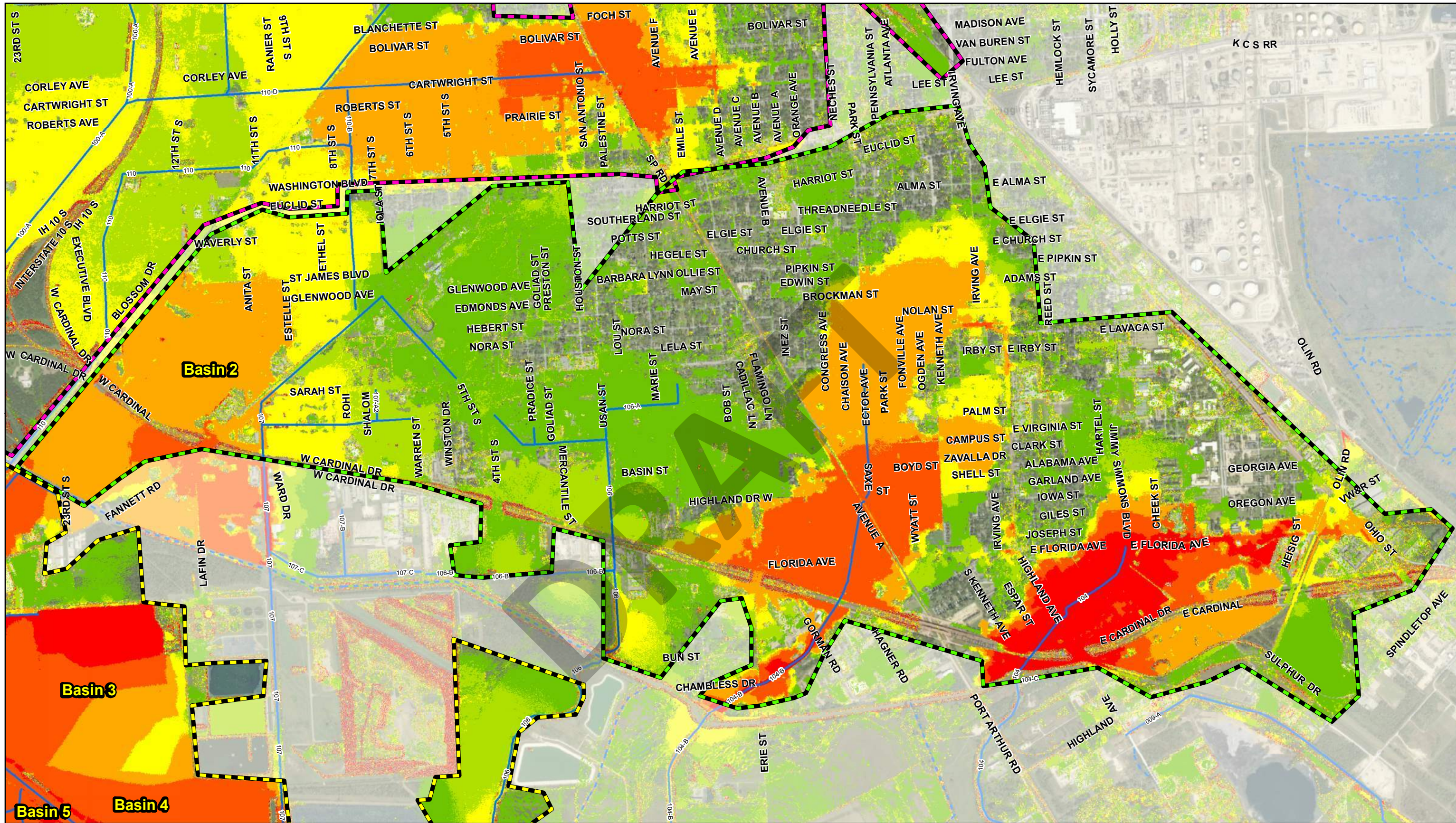
- Legend**
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel



100-Year WSEL Reductions South Park Diversion & Basin 2

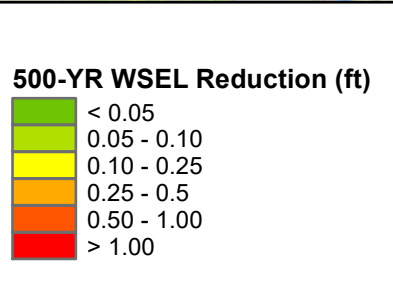


Exhibit # 34



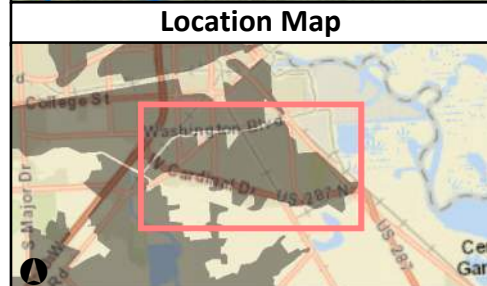
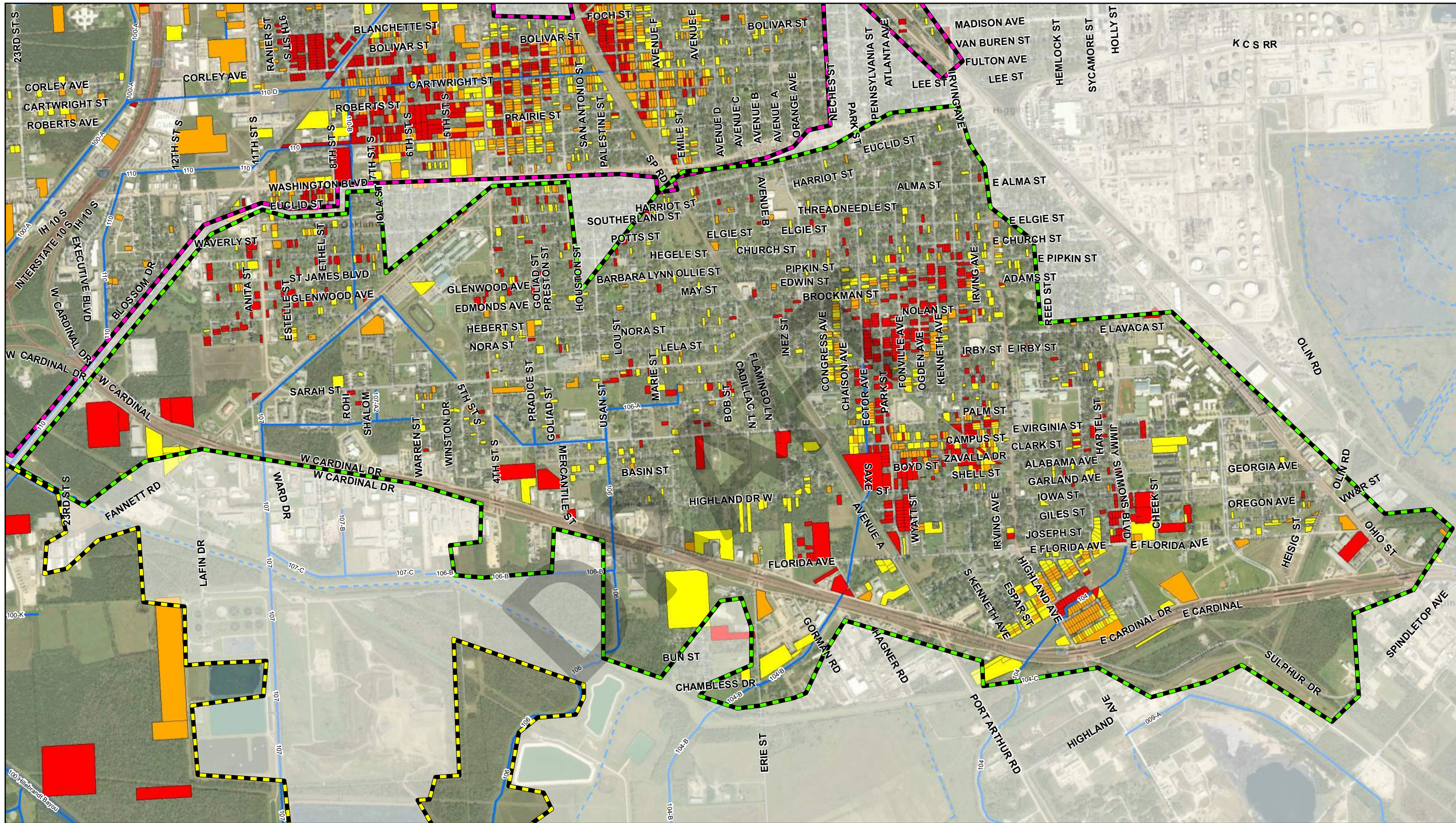
- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

- Legend**
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel



500-Year WSEL Reductions South Park Diversion & Basin 2





Project Areas of Influence

- Basins 3-10
- Blanchette Diversion & Basin 1
- Lucas Diversion
- South Park Diversion & Basin 2
- Tevis Diversion

Open Channels

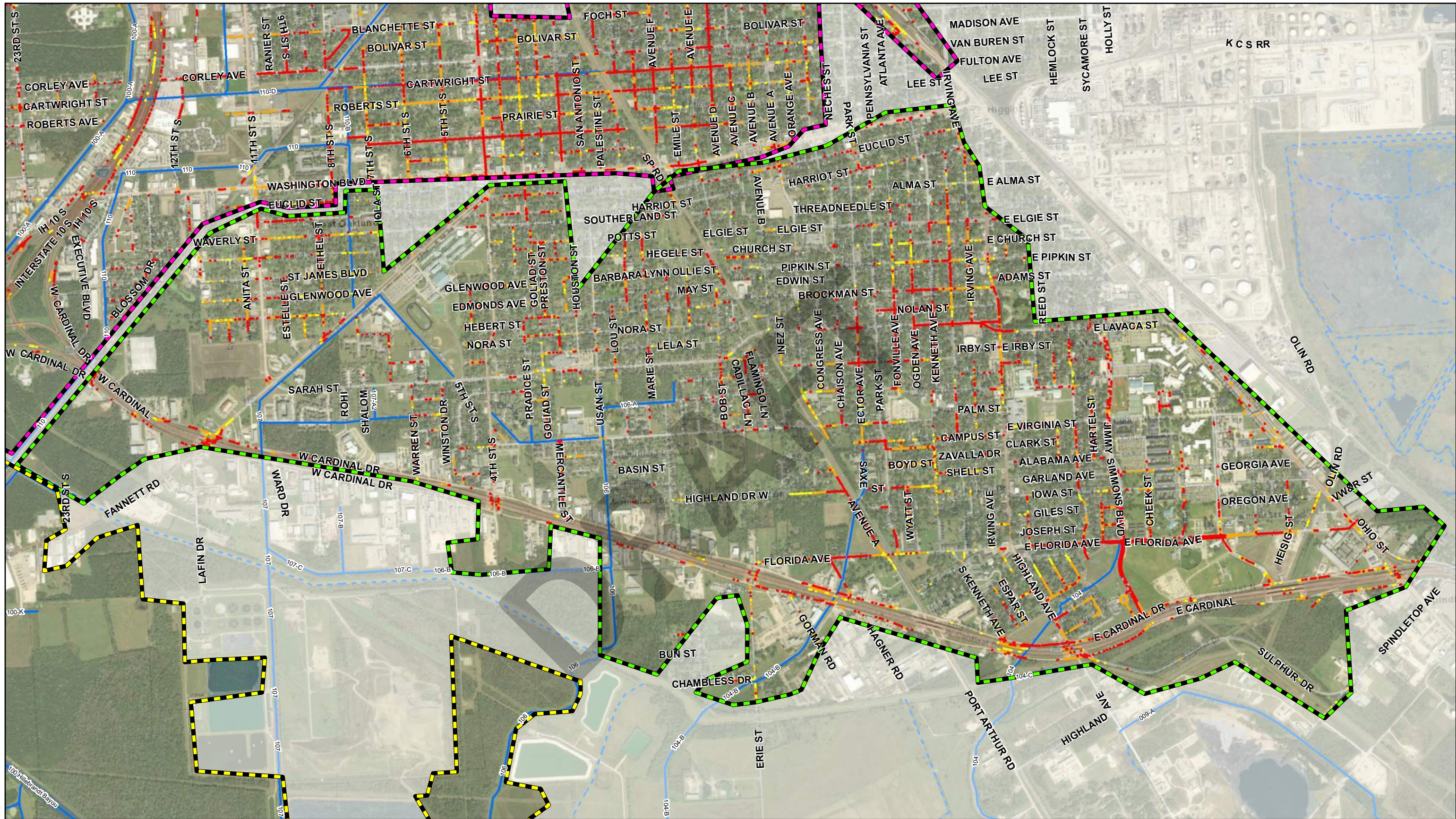
- DD6 Channel
- Non-DD6 Channel

Parcels Removed from Floodplain

- 10-Year
- 100-Year
- 500-Year

**Parcels Removed from Floodplain
South Park Diversion & Basin 2**

Exhibit # 36








Location Map



LAN Lockwood, Andrews & Newnam, Inc.
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Project Areas of Influence



-  Basins 3-10
-  Blanchette Diversion & Basin 1
-  Lucas Diversion
-  South Park Diversion & Basin 2
-  Tevis Diversion

Legend

Roadway Removed from Floodplain

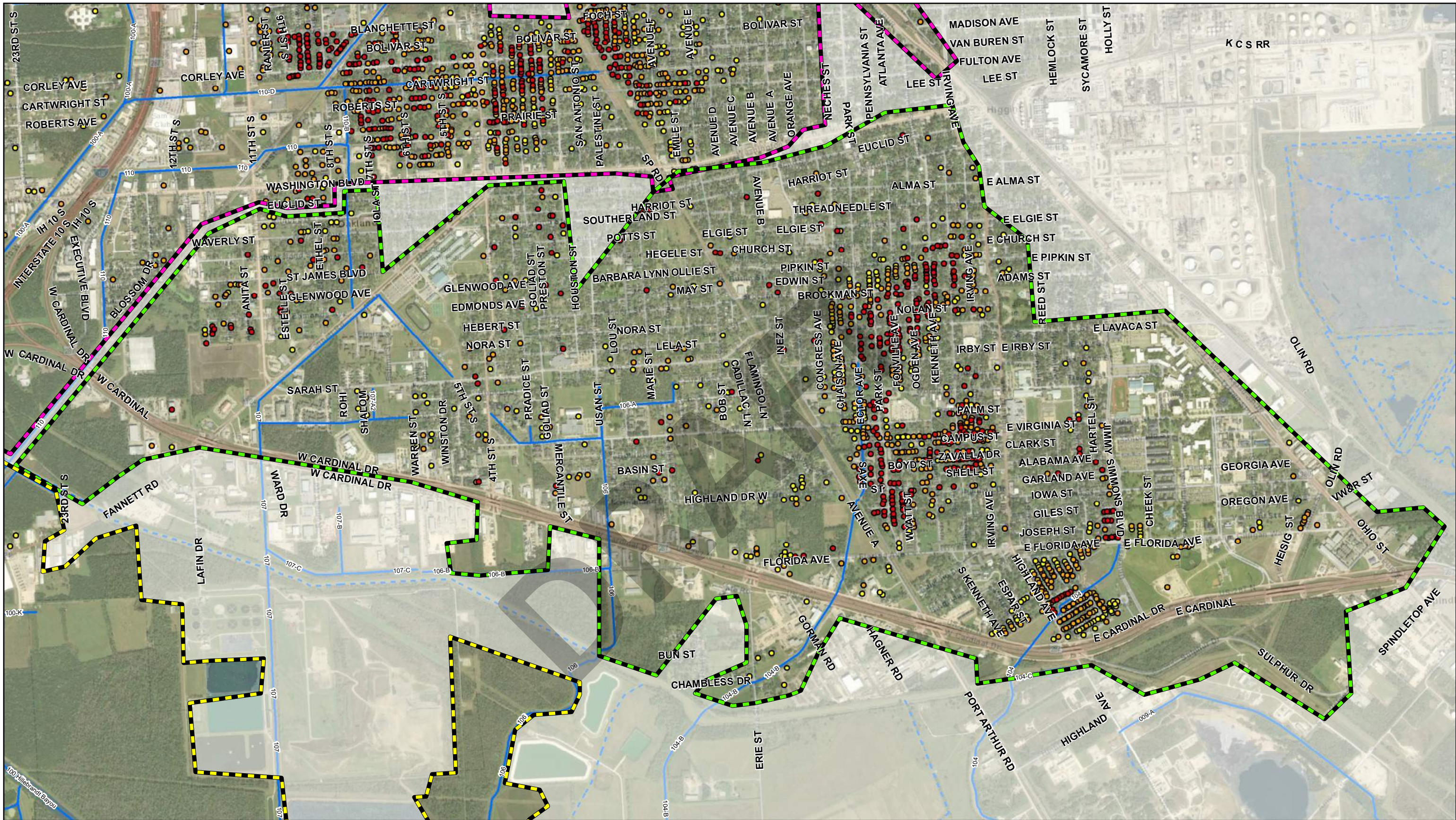
-  10-Year
-  100-Year
-  500-Year

Open Channels

-  DD6 Channel
-  Non-DD6 Channel

**Roadway Removed from Floodplain
South Park Diversion & Basin 2**





Location Map



LAN Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

Project Areas of Influence

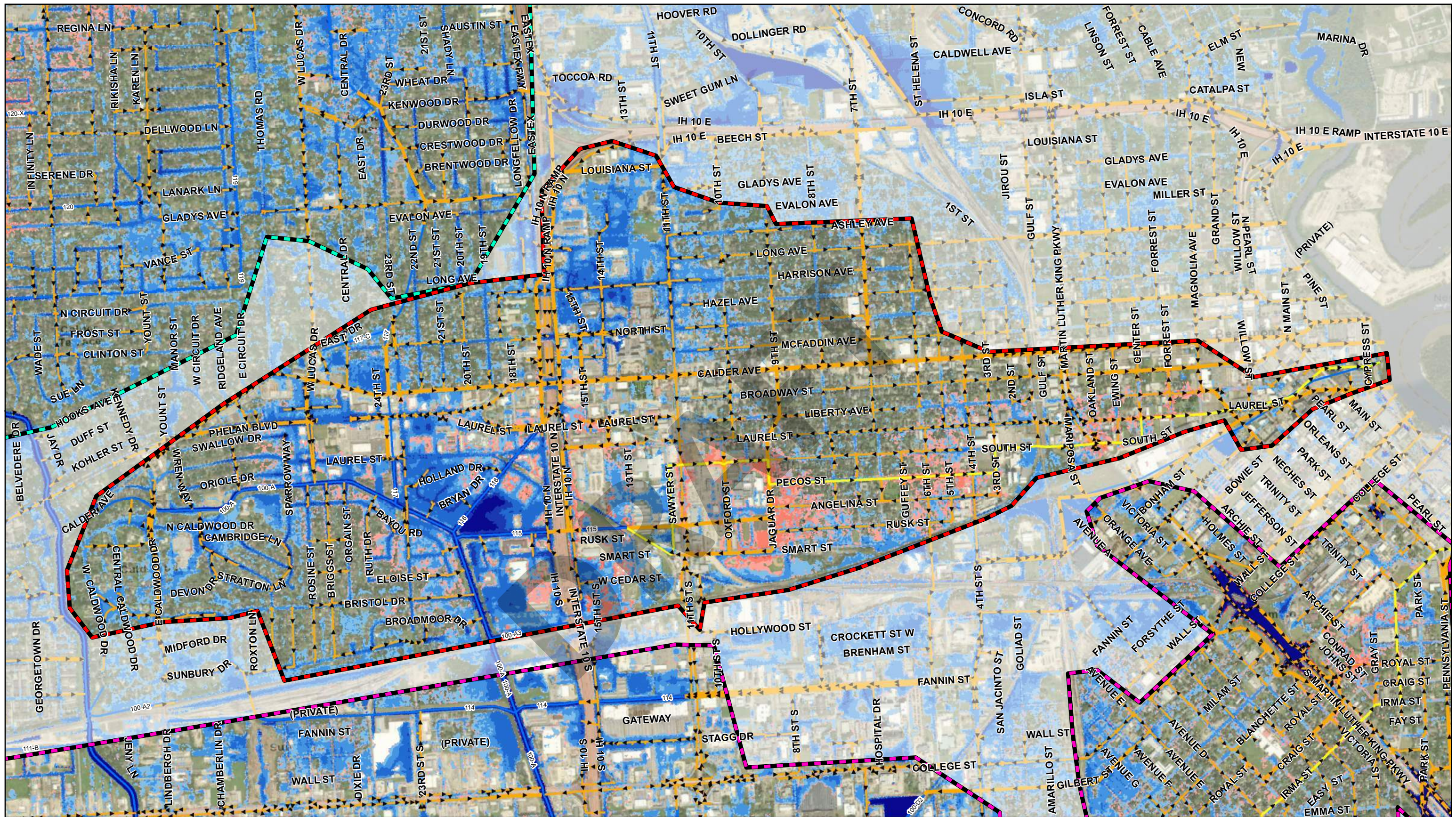
- Basins 3-10
- Blanchette Diversion & Basin 1
- Lucas Diversion
- South Park Diversion & Basin 2
- Tevis Diversion

Legend

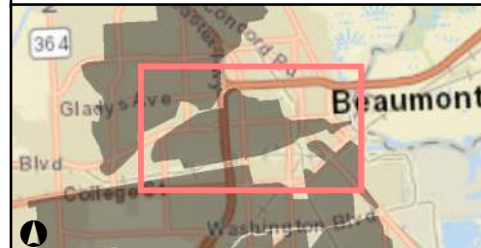
- Structures Removed from Flooding**
 - 10-Year
 - 100-Year
 - 500-Year
- Open Channels**
 - DD6 Channel
 - Non-DD6 Channel

**Structures Removed from Flooding
South Park Diversion & Basin 2**





Location Map



LAN Lockwood, Andrews & Newnam, Inc.
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- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

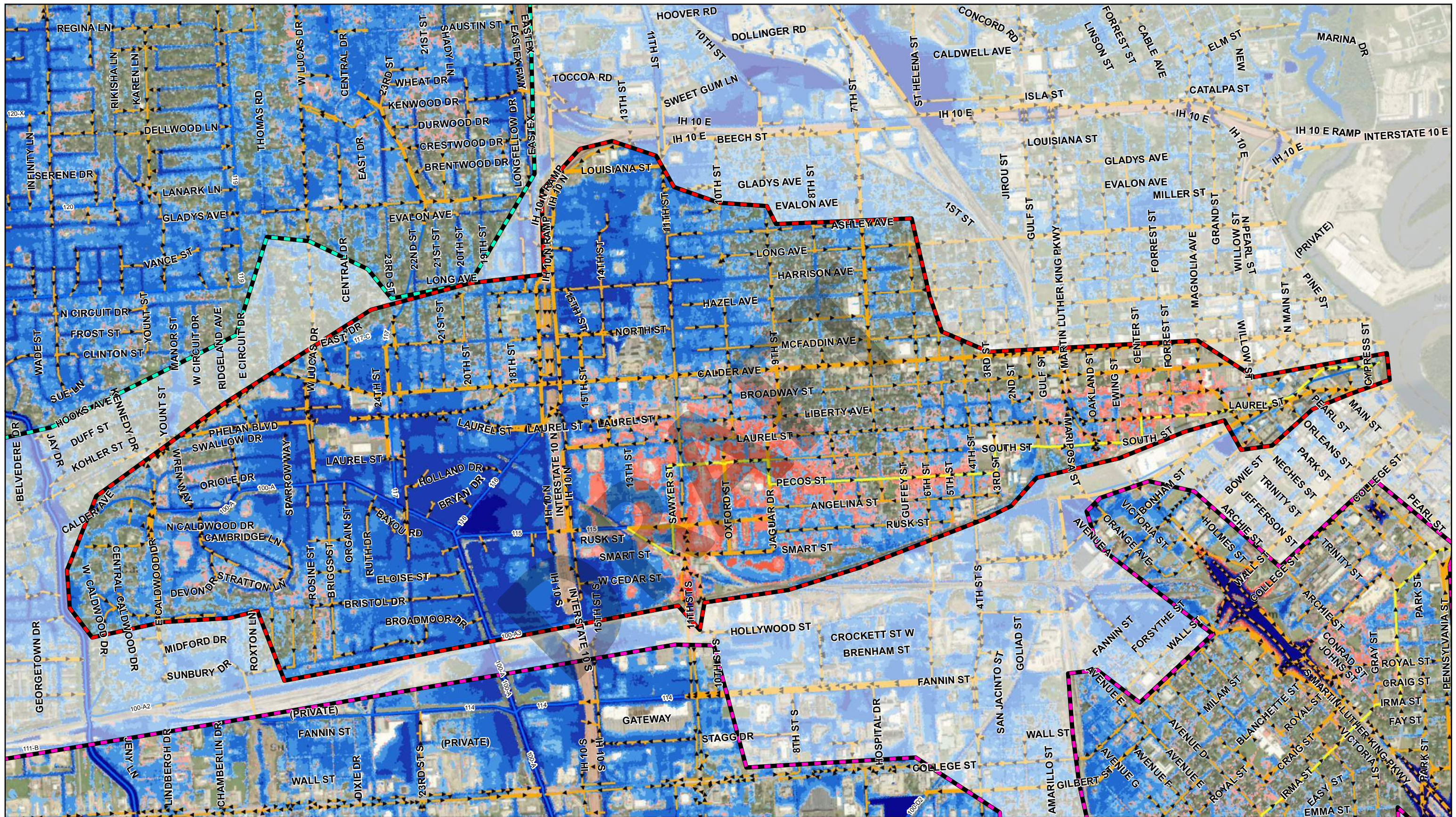
- Legend**
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel
- Existing Storm Sewer**
- < 48"
 - > 48"
- Proposed Storm Sewer**
- Proposed Storm Sewer

- Proposed 10-YR Ponding**
- 0.25 - 0.50
 - 0.50 - 1.0
 - 1.0 - 2.0
 - 2.0 - 5.0
 - > 5.0
 - Existing 10-YR Ponding

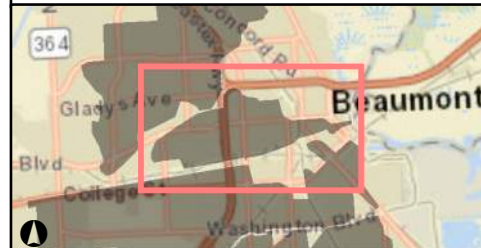
10-Year Proposed Ponding Tevis Diversion



Exhibit # 39



Location Map



0 3,300 Feet



- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

Legend

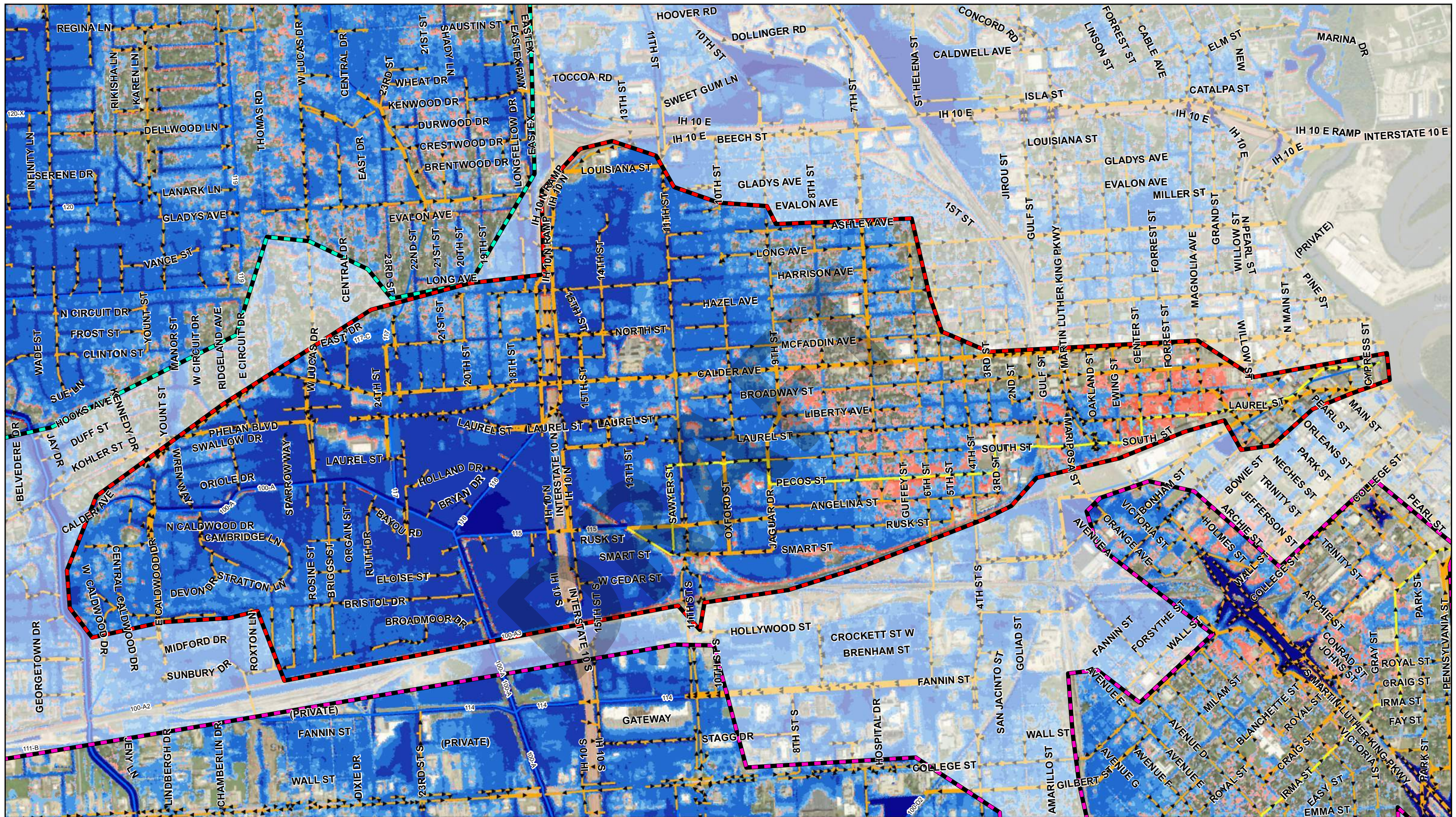
- Open Channels**
- DD6 Channel
 - Non-DD6 Channel
- Existing Storm Sewer**
- < 48"
 - > 48"
- Proposed Storm Sewer**
- Proposed Storm Sewer

- Proposed 100-YR Ponding**
- 0.25 - 0.50
 - 0.50 - 1.0
 - 1.0 - 2.0
 - 2.0 - 5.0
 - > 5.0
 - Existing 100-YR Ponding

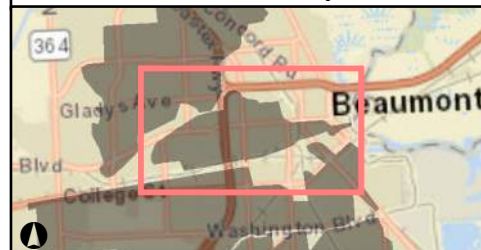
**100-Year Proposed Ponding
Tevis Diversion**



Exhibit # 40



Location Map



0 3,300 Feet



Project Areas of Influence

- Basins 3-10
- Blanchette Diversion & Basin 1
- Lucas Diversion
- South Park Diversion & Basin 2
- Tevis Diversion

Legend

Open Channels

- DD6 Channel
- Non-DD6 Channel

Existing Storm Sewer

- < 48"
- > 48"

Proposed Storm Sewer

- Proposed Storm Sewer

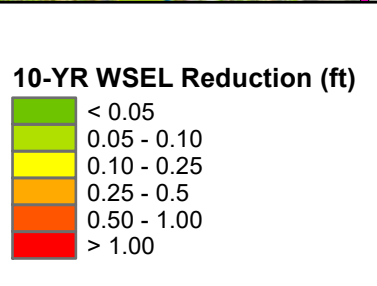
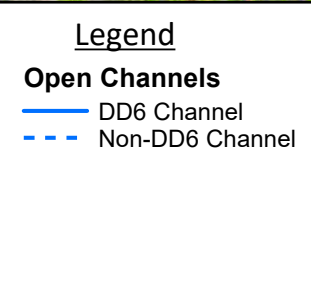
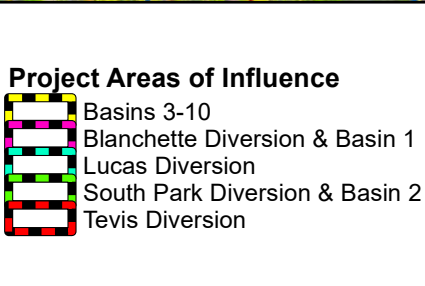
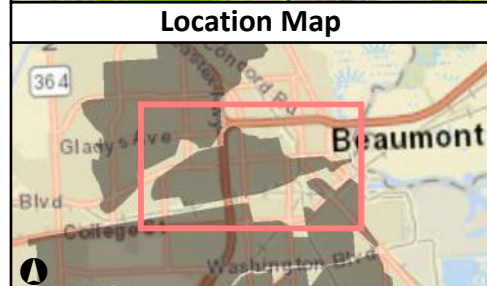
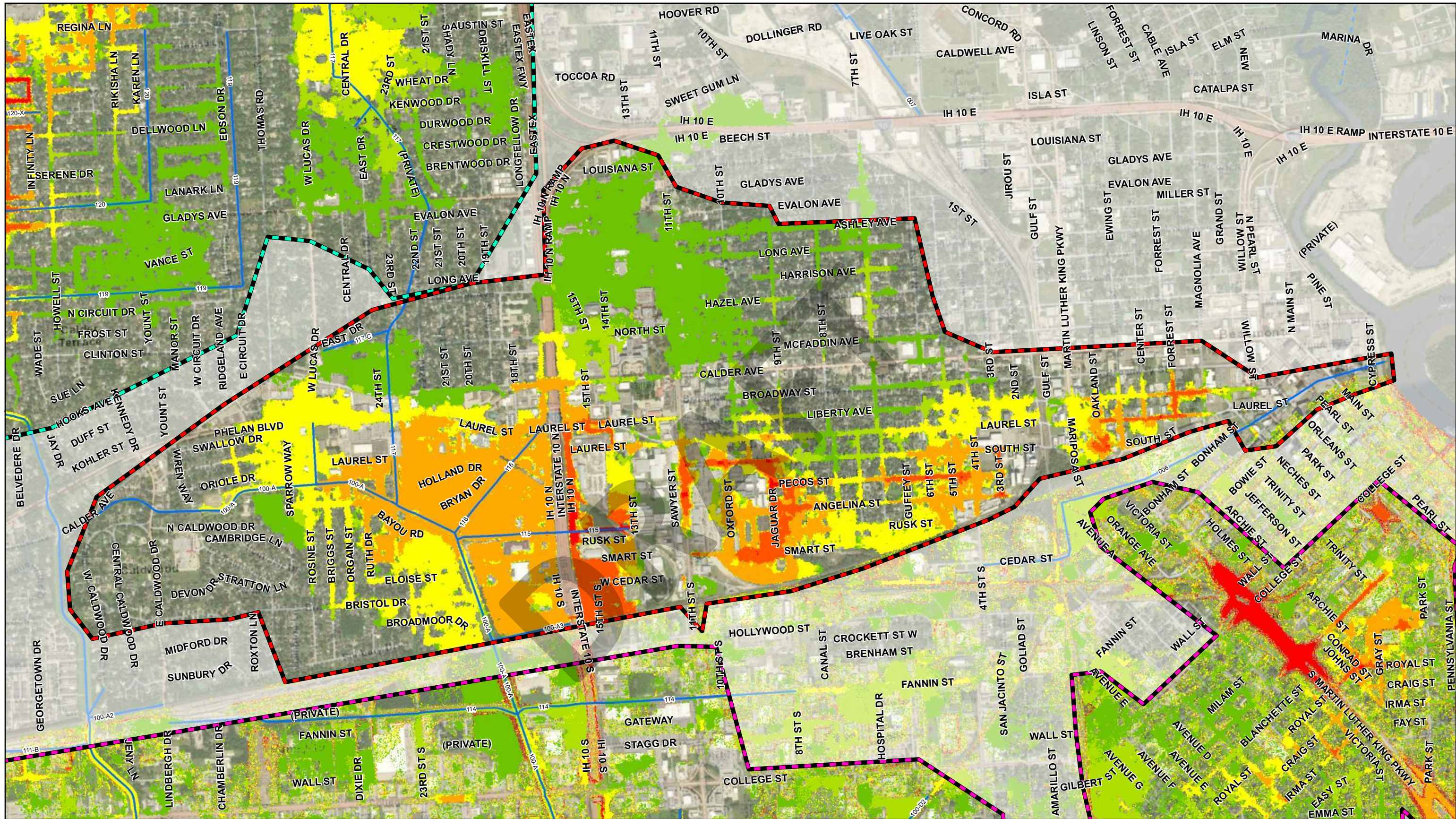
Proposed 500-YR Ponding

- 0.25 - 0.50
- 0.50 - 1.0
- 1.0 - 2.0
- 2.0 - 5.0
- > 5.0
- Existing 500-YR Ponding

500-Year Proposed Ponding Tevis Diversion



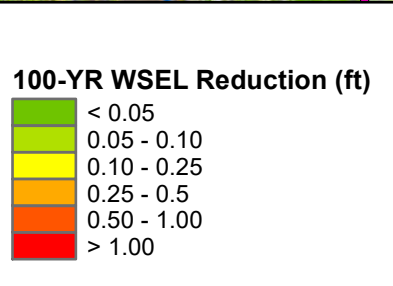
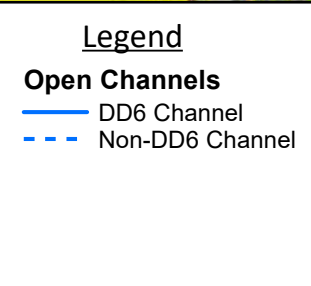
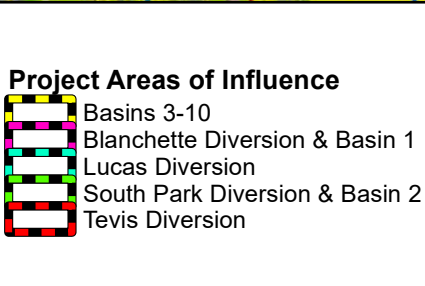
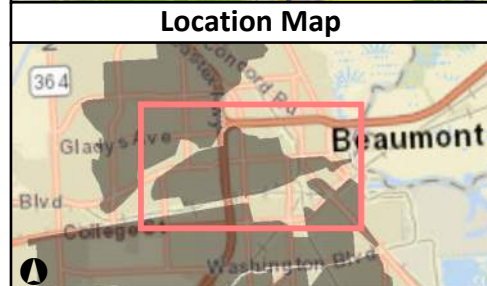
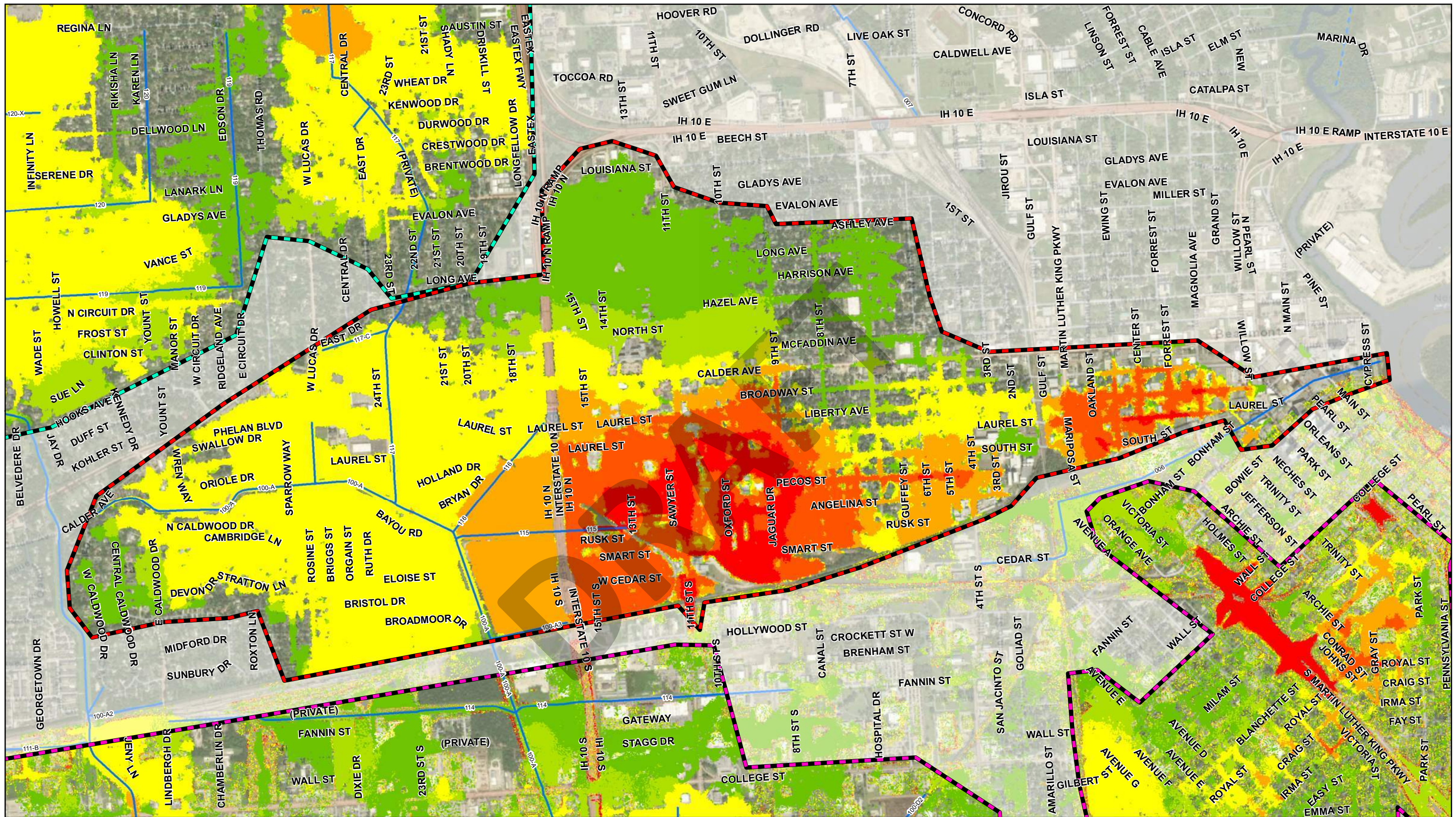
Exhibit # 41

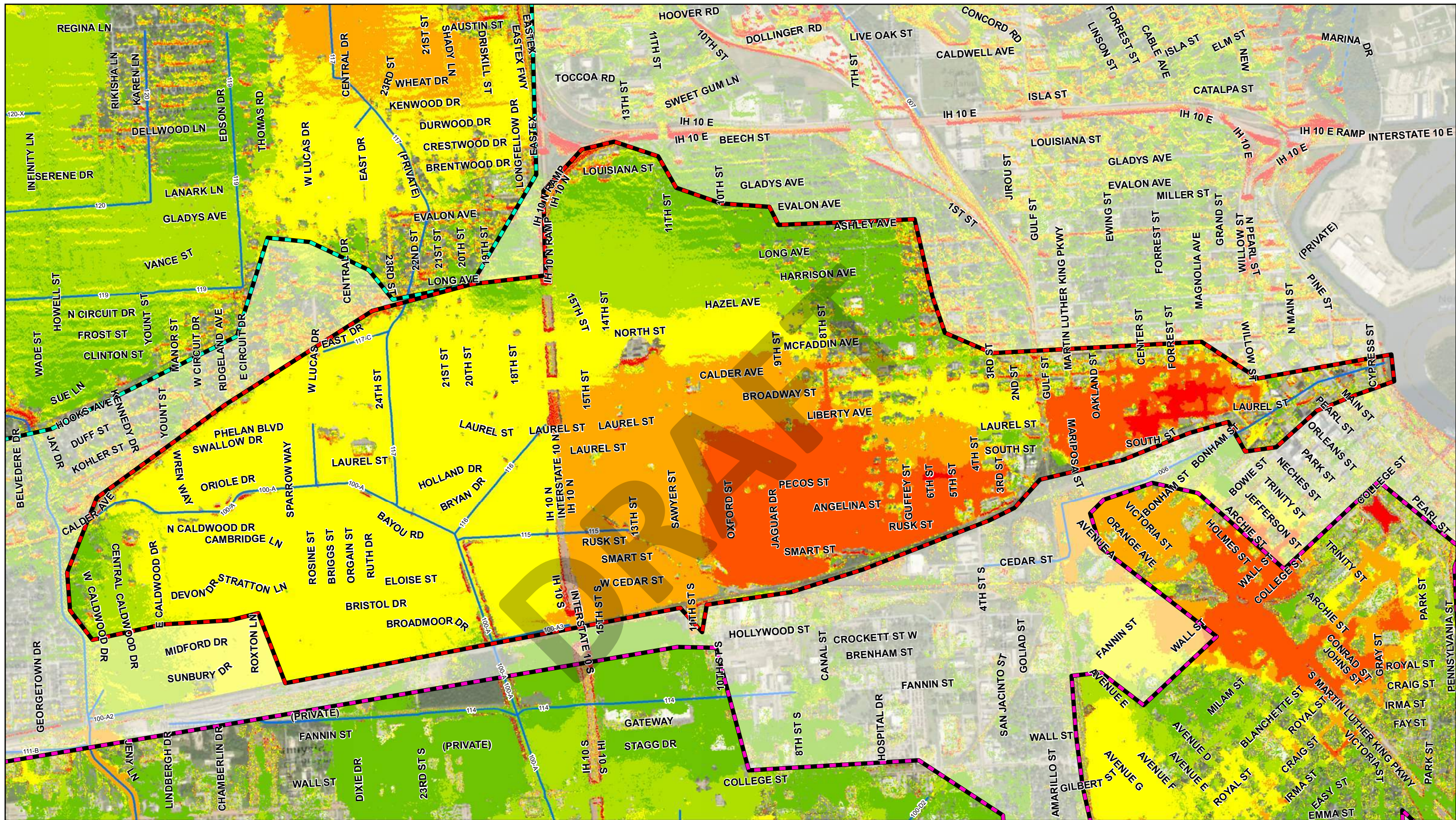


10-Year WSEL Reductions Tevis Diversion

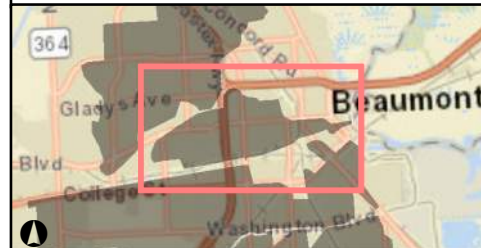


Exhibit # 42





Location Map

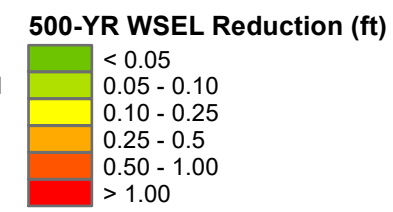


LAN Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

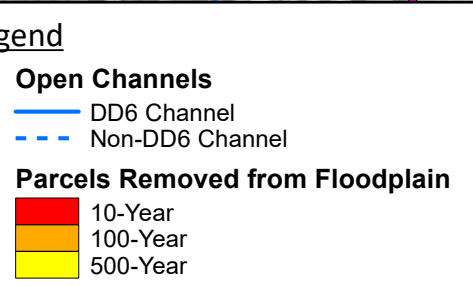
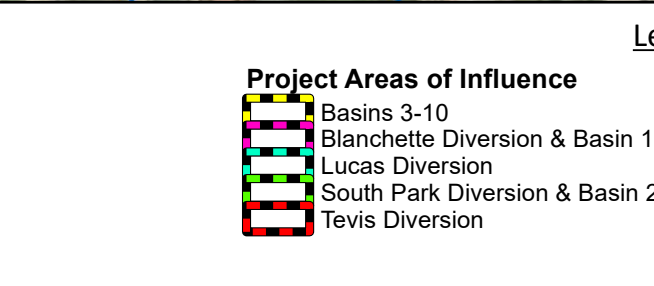
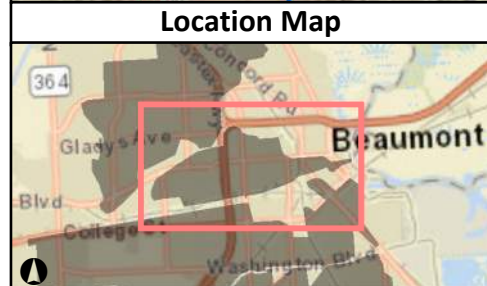
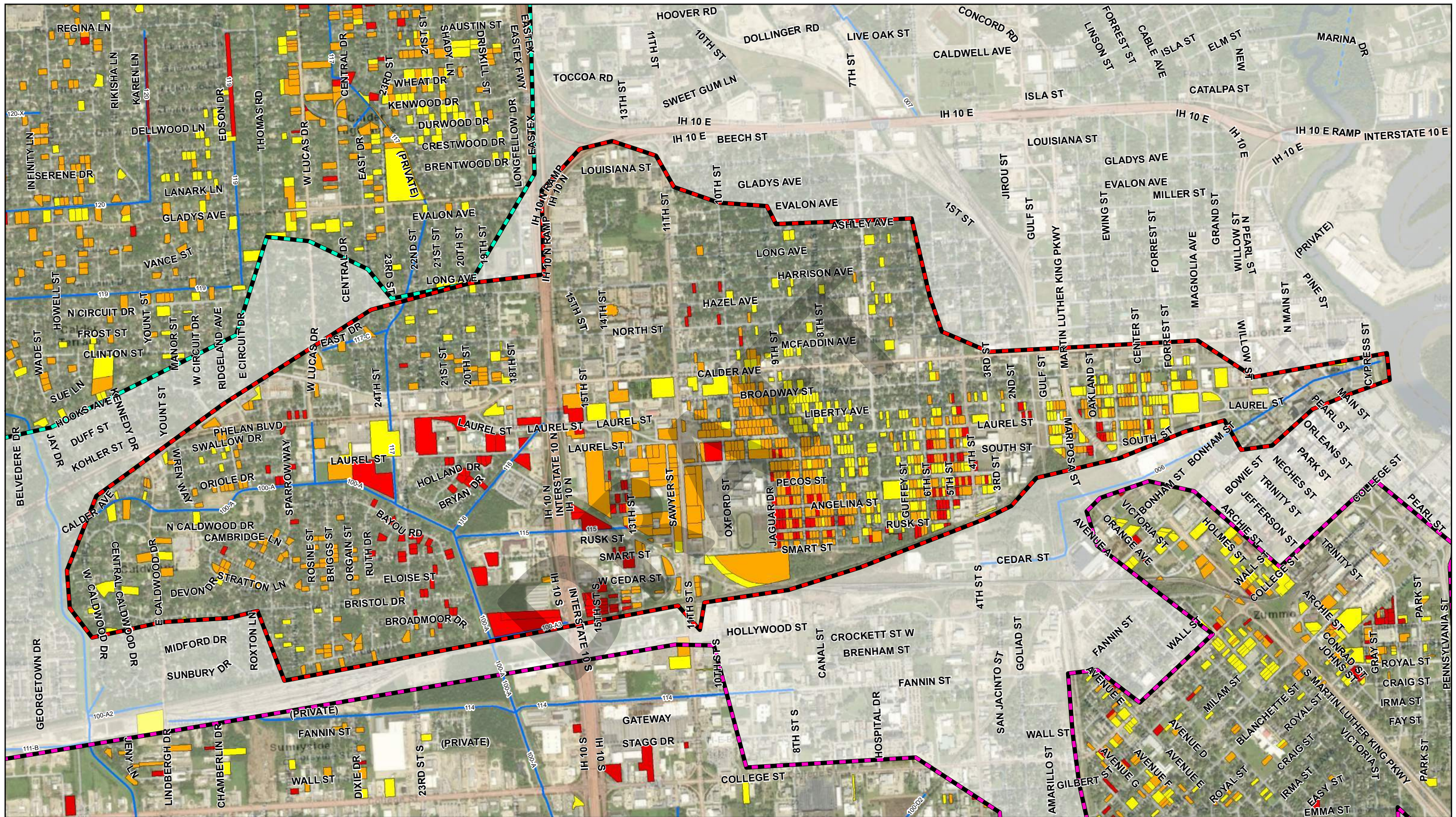
Legend

- Open Channels**
- DD6 Channel
 - Non-DD6 Channel



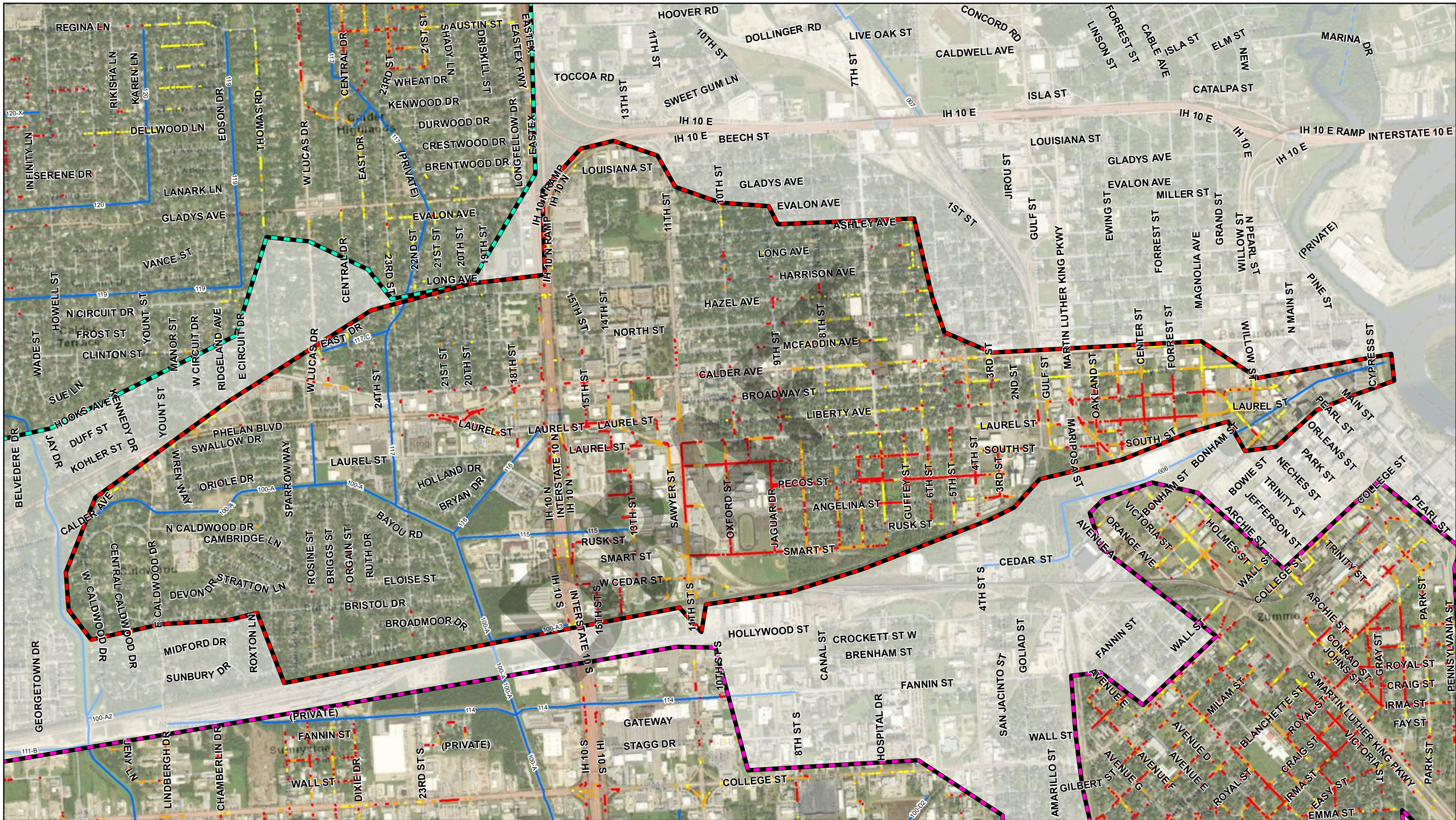
**500-Year WSEL Reductions
Tevis Diversion**





Parcels Removed from Floodplain Tevis Diversion





Location Map



LAN Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

- Project Areas of Influence**
- Basins 3-10
 - Blanchette Diversion & Basin 1
 - Lucas Diversion
 - South Park Diversion & Basin 2
 - Tevis Diversion

Legend

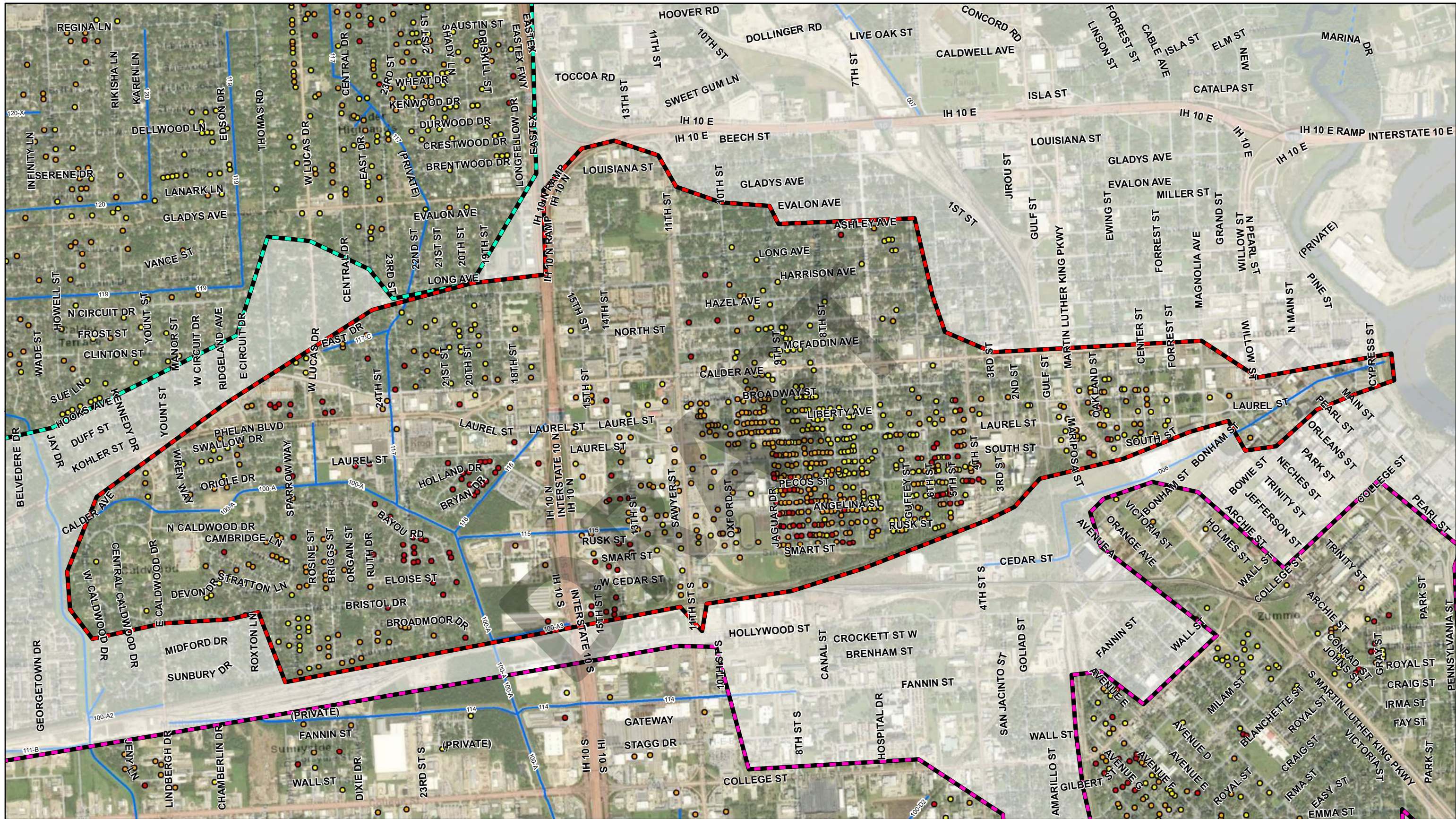
- Roadway Removed from Floodplain**
- 10-Year
 - 100-Year
 - 500-Year

Open Channels

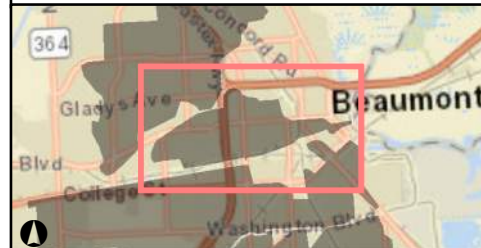
- DD6 Channel
- Non-DD6 Channel

**Roadway Removed from Floodplain
Tevis Diversion**





Location Map



LAN Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

Project Areas of Influence

- Basins 3-10
- Blanchette Diversion & Basin 1
- Lucas Diversion
- South Park Diversion & Basin 2
- Tevis Diversion

Legend

- Structures Removed from Flooding**
- 10-Year
- 100-Year
- 500-Year
- Open Channels**
- DD6 Channel
- Non-DD6 Channel

**Structures Removed from Flooding
Tevis Diversion**



Exhibit # 47