HC-D4-4
HC-D4-5
HC-D4-6
HC-D4-3
HC-D4-2
HC-D3-3-4
HC-D3-5
HW-D4-7
HW-D4-8
HW-D4-9
HW-D5-1
HW-D5-2
Davie
Playland Isles
Broward Gardens
Seminole Paradise
Hollywood Memorial Gardens North
Hollywood Reservation
Patrick J Meli Park
Club at Emerald Hills
Sheridan Plaza
Playland Estates
Griffin Rd
Orange Dr
Stirling Rd
Florida's Turnpike
Hollywood Canal
Lagoon Dr
Seminole Way
Davie Rd
SW 40th Ave
SW 49th St
SW 51st St
SW 52nd St
SW 54th Ct
SW 57th St
SW 67th Ave
SW 58th Ct
SW 56th St
SW 48th Ct
SW 49th Ct
SW 50th St
SW 53rd Ct
SW 54th St
N 41st St
N 41st Ct
N 36th Ct
Ashbury Rd
Berkley Rd
Franklin St
Perry St
Evans St
Meade St
Custer St
McClellan St
Cody St
Dunwood Pl
NW 30th Ct
NW 30th St
NW 29th St
NW 28th St
Farragut St
Douglas St
Freedom St
Simms St
Thomas St
Liberty St
Brookfield Cir E
Lakeshore Dr
St Andrews Rd
Keyser Ave
Greens
Fern Dr
Royal Palm Blvd
848

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Existing Gravity Pipes
- Existing Forcemains

10-Year 72-Hour Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Playland / 441 Corridor North
10-year Design Storm

0 500 1,000 2,000 Feet

1:18,000

City of Hollywood Stormwater Master Plan

HW-D4-7_EC-10

2/28/2023

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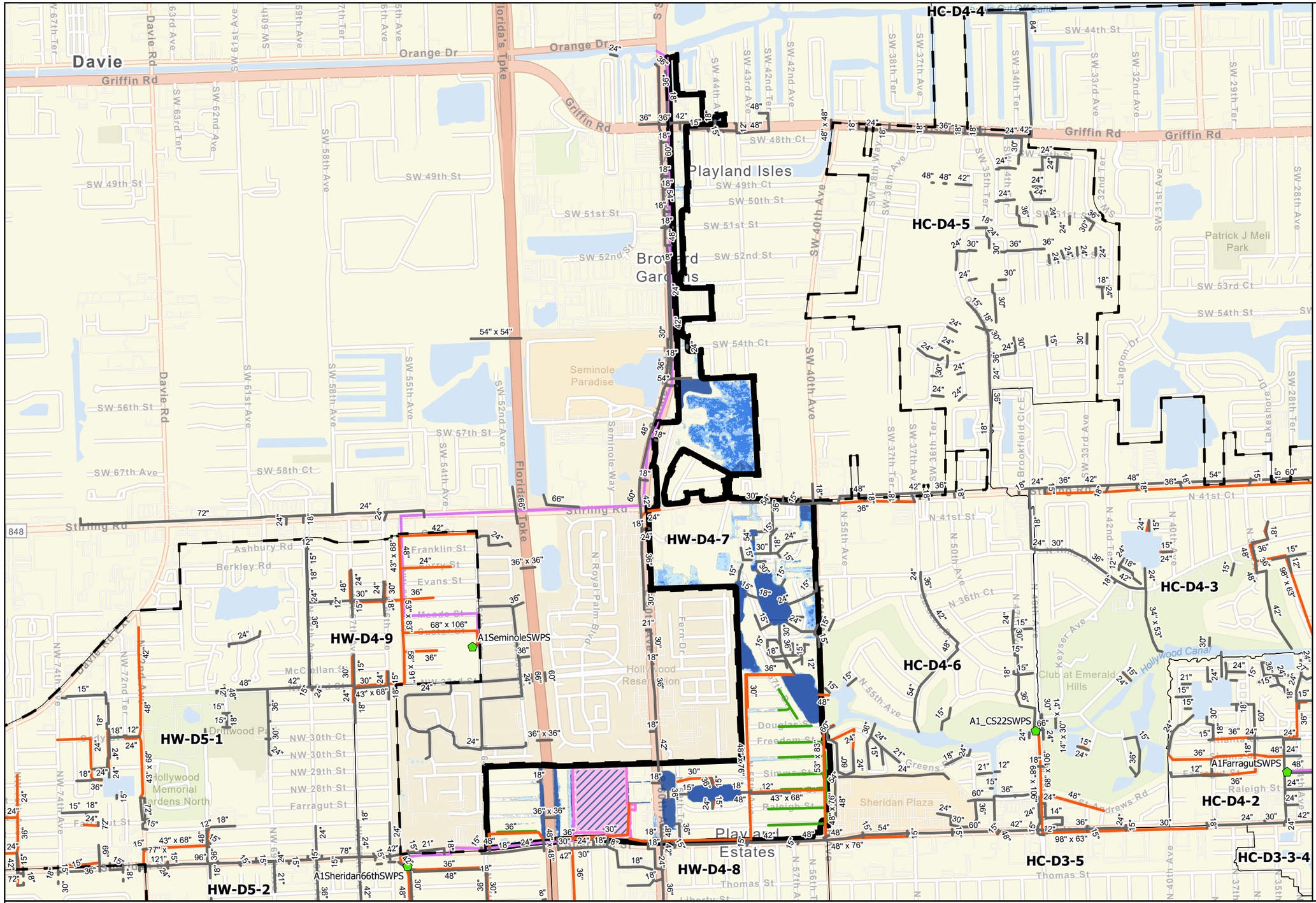

Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area
Playland / 441 Corridor North

City of Hollywood Stormwater Master Plan
HW-D4-7_ALT1-5
2/28/2023

0 500 1,000 2,000 Feet
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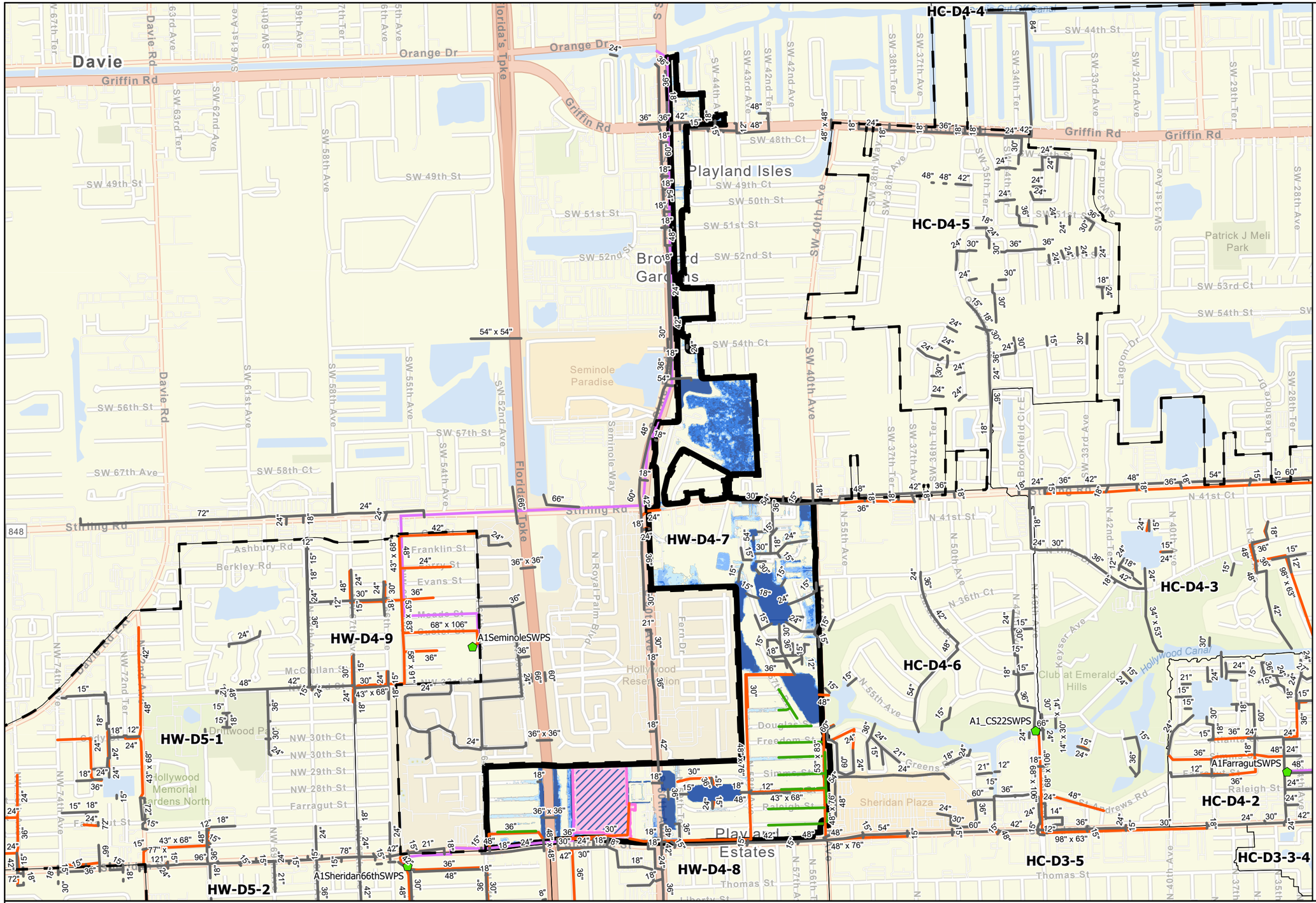

Predicted Flooding Reduction and Proposed ALT 1 CIP for 10-year Design Storm in CIP Area
Playland / 441 Corridor North

CDM Smith
CITY OF Hollywood FLORIDA

0 500 1,000 2,000 Feet
1:18,000

City of Hollywood Stormwater Master Plan
HW-D4-7_ALT1-10
2/28/2023

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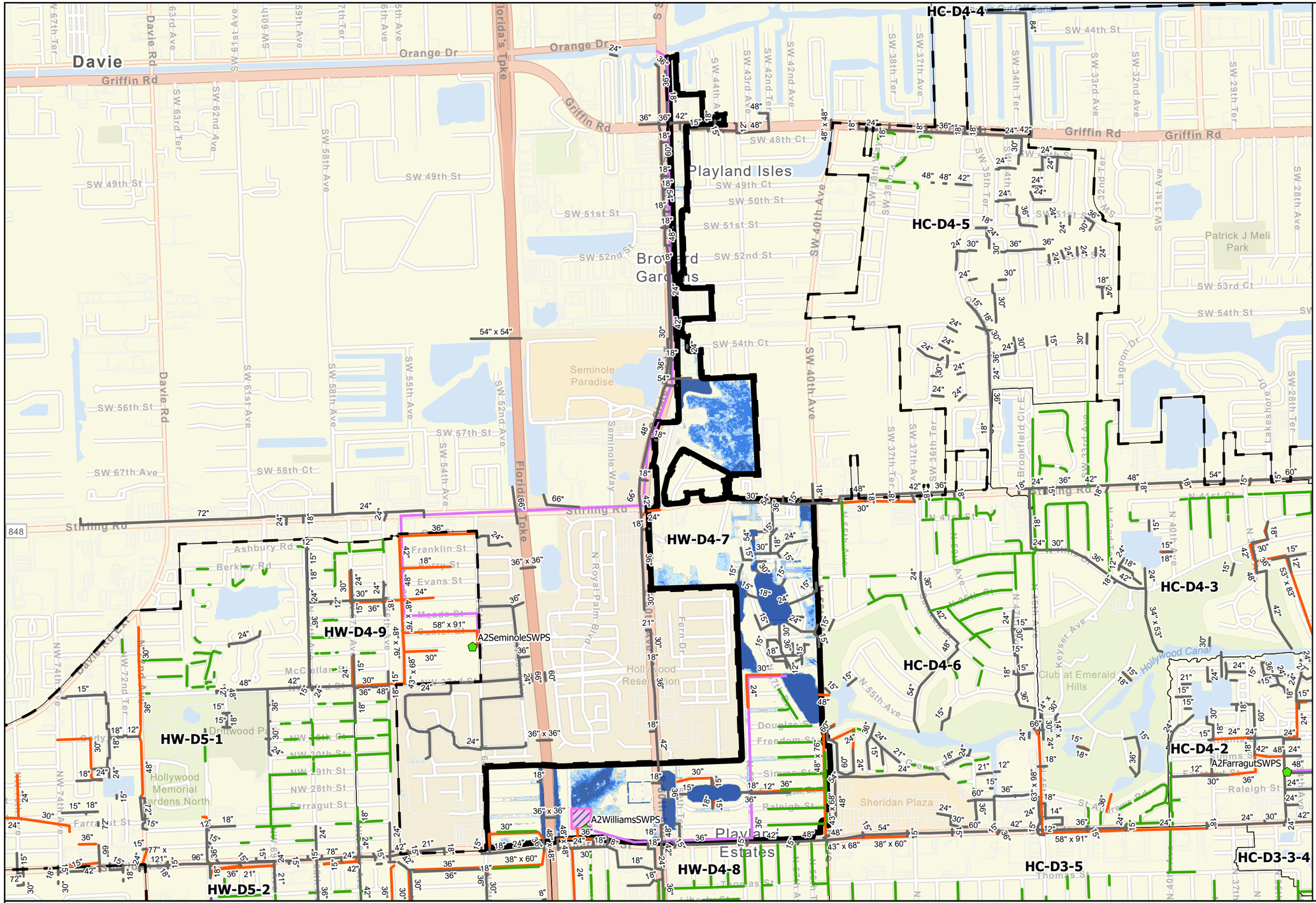

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Alt 2 SWPS
- Alt 2 Injection Wells
- Existing Gravity Pipes
- Existing Forcemains
- Alt 2 Exfiltration Pipe
- Alt 2 Gravity Pipes
- Alt 2 Forcemains
- Alt 2 Detention Pond

5-Year ALT 2 Storm Flood Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

CDM Smith

CITY OF Hollywood FLORIDA

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area Playland / 441 Corridor North

0 500 1,000 2,000 Feet

1:18,000

City of Hollywood Stormwater Master Plan

HW-D4-7_ALT2-5

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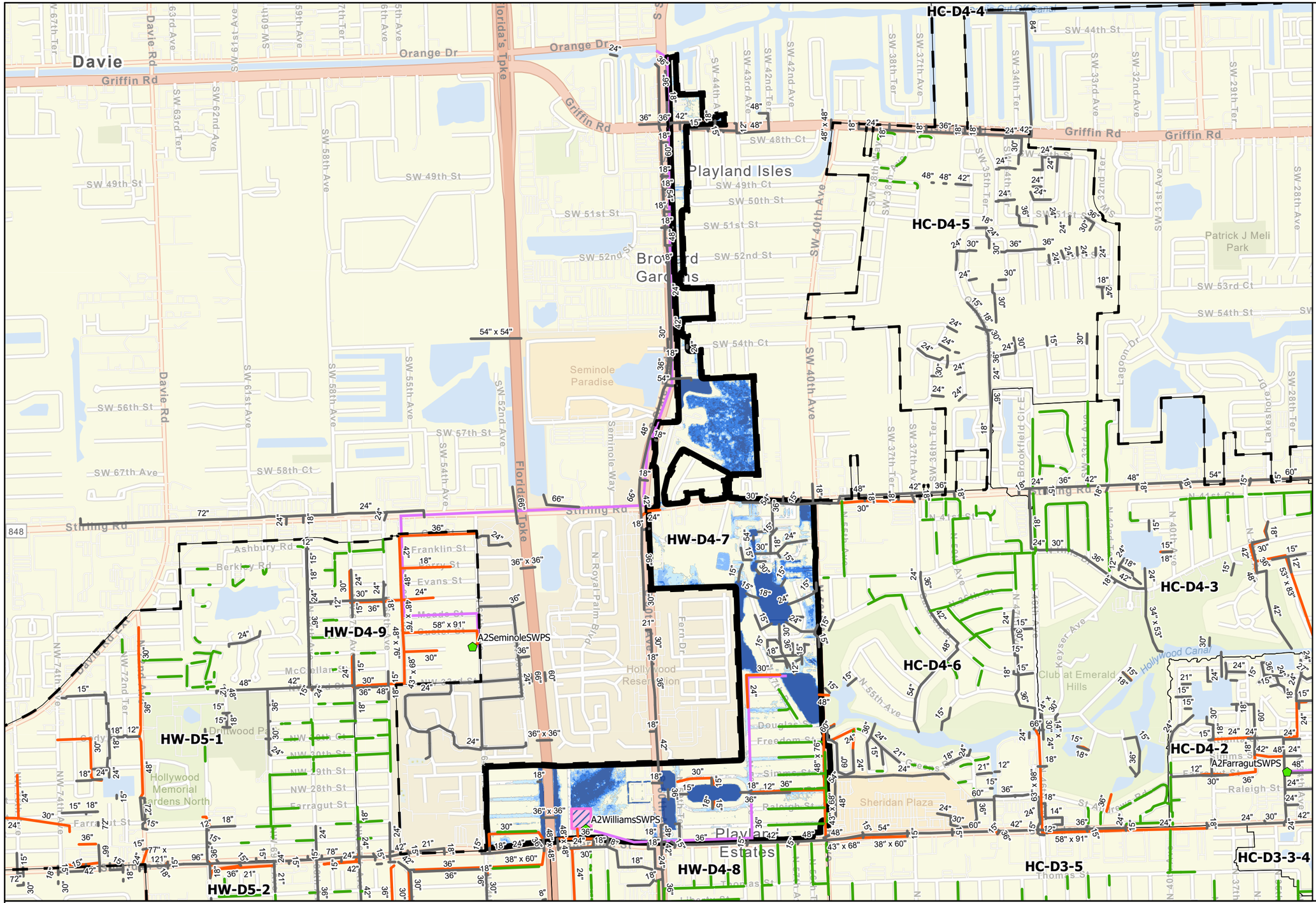

Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area
Playland / 441 Corridor North

CDM Smith

CITY OF Hollywood FLORIDA

0 500 1,000 2,000 Feet

1:18,000

City of Hollywood Stormwater Master Plan

HW-D4-7_ALT2-10

2/28/2023

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		CONCEPTUAL CAPITAL COST ESTIMATE					D4_7 441 Corridor North and Playland	
							Alternative 1	
PUMP STATIONS WITH FORCE MAINS								
ITEM #	Master Sheet Index	DIAMETER (INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24	FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36	FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42	FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48	FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54	FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60	FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66	FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72	FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24	FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11		IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12		IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs		I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs		II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs		III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs		IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS			EA	$ 8,000,000.00	0	$ -
AIN SUBTOTAL								$ -
EXFILTRATION WITH GRAVITY MAINS							4_7 441 Corridor North and Playlar	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0020	21	15		GM-Gravity Main Collector	Circular	LF	$ 40.00	0	$ -
0021	22	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	585	$ 28,080
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	2,735	$ 142,220
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	2,500	$ 200,000
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	360	$ 45,000
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	1,165	$ 431,050
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	1,120	$ 483,840
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	84	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	7,105	$ 1,776,250
0056	50			Weir Box CS		EA	$ 7,500.00	1	$ 7,500
0057	53			CS-22 Remod		EA	$ 200,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0055				Gravity Structures-Inlets		EA	$ 30,000.00	130	$ 3,892,500
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	19	$ 6,568
							#N/A		
							#N/A		
	GRAVITY MAIN SUBTOTAL						#N/A		$ 7,006,440
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	15,570	$ 4,203,900
							CONSTRUCTION COST SUBTOTAL		**$ 11,210,340**
GENERAL CONDITIONS							4_7 441 Corridor North and Playlar	
0061		Mobilization				LS	**4%**	$ 11,210,340	$ 448,414
0062		Insurance and General Conditions				LS	**2%**	$ 11,210,340	$ 224,207
0063		Permits/Fees				LS	**2%**	$ 11,210,340	$ 224,207
0064		Maintenance of Traffic				LS	**3%**	$ 11,210,340	$ 336,310
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 11,210,340	$ 1,681,551
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 11,210,340	$ 448,414
0067		OCI Management Cost				LS	**15%**	$ 11,210,340	$ 1,681,551
0068		Project Contingency Costs				LS	**30%**	$ 11,210,340	$ 3,363,102
		Land acquisition							
NS SUBTOTAL									$ 8,407,755
TOTAL									**$ 19,618,095**

		CONCEPTUAL CAPITAL COST ESTIMATE						D4_7 441 Corridor North and Playland	
								Alternative 2	
PUMP STATIONS WITH FORCE MAINS									
ITEM #	Master Sheet Index	DIAMETER (INCHES)		DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24		FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36		FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42		FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48		FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54		FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60		FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66		FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72		FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24		FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs			III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs			IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS				EA	$ 8,000,000.00	0	$ -
IN SUBTOTAL									$ -
EXFILTRATION WITH GRAVITY MAINS								4_7 441 Corridor North and Playlan	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0022	22	21		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0021	21	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	150	$ 6,750
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	860	$ 41,280
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	2,400	$ 124,800
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	1,940	$ 155,200
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	390	$ 48,750
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	0	$ -
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	1,120	$ 448,000
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	0	$ -
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	72	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	7,105	$ 1,776,250
0055	50			Weir Box CS		EA	$ 30,000.00	1	$ 30,000
0057	53			CS-22 Remod		EA	$ 525,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0056				Gravity Structures-Inlets		EA	$ 7,500.00	116	$ 872,813
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	2	$ 746
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL								$ 3,503,843
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	13,965	$ 3,770,550
							CONSTRUCTION COST SUBTOTAL		$ 7,274,393
GENERAL CONDITIONS								4_7 441 Corridor North and Playlan	
0061		Mobilization				LS	4%	$ 7,274,393	$ 290,976
0062		Insurance and General Conditions				LS	2%	$ 7,274,393	$ 145,488
0063		Permits/Fees				LS	2%	$ 7,274,393	$ 145,488
0064		Maintenance of Traffic				LS	3%	$ 7,274,393	$ 218,232
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 7,274,393	$ 1,091,159
0066		Construction Engineering Inspection Costs				LS	4%	$ 7,274,393	$ 290,976
0067		OCI Management Cost				LS	15%	$ 7,274,393	$ 1,091,159
0068		Project Contingency Costs				LS	30%	$ 7,274,393	$ 2,182,318
NS SUBTOTAL									$ 5,455,794
TOTAL									$ 12,730,187

- **Figure HW-D4-7-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HW-D4-7-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HW-D4-7_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HW-D4-7_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.3 Hollywood Central Basin (HC) - Proposed CIP

The HC basin northern end drains to the C-11 canal and is mostly private developments. The central area is a plateau and flows nowhere and has a connection to the C-10 canal. A low flood plain exists along the C-10 canal and pumping is required to meet the LOS. South of Sheridan exfiltration works well in most areas due to the higher elevation. In a 100 yr storm there is massive sheet flow down the streets to the C-10 canal. The series of interconnected lakes and the CS-22 forward pumping concept between Sterling Road and Sheridan Street are key to the LOS for the basin for ALT 1 but may not be permittable due to the additional flows. Stormwater wells are not permitted due to being west of the 10,000 TDS line.

3.2.3.1 CIP Area HC-D4-4 (Alandco)

Root Causes of Flooding

This CIP area is characterized by high impervious, industrial and commercial land use and has a sufficiently sized existing drainage system. Only a few areas of the subbasin require CIP.

Alternatives 1 & 2

- This area currently meets the LOS with the exceptions shown below where road crowns dip to too low elevations.

Summary of Locations Not Meeting LOS:

1. Structures Flooded pre-0, post-0.
2. SW 42nd Street, road dips east of SW 30th Ave, raise to match the existing road elevations on either side approximately 500 ft.

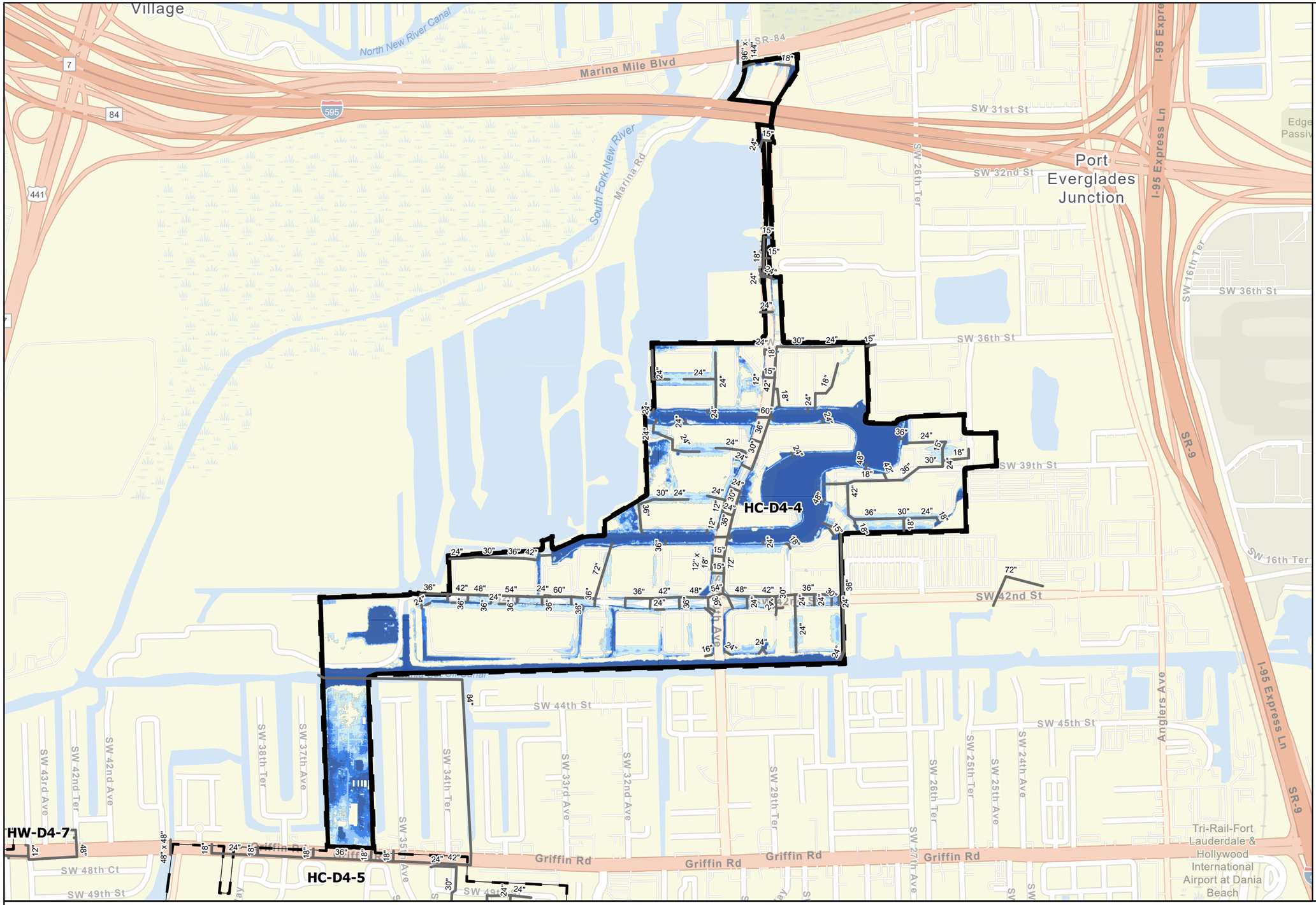
Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D4-4 Pre-Post CIP Flood Inundation Maps

The following figures provide the predicted existing conditions flooding for the 5- and 10-year storm in the CIP Area and the predicted flood reduction for these storms under the Alternatives 1 and 2 CIP:

- **Figure HC-D4-4-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D4-4-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**



Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Existing Gravity Pipes
- Existing Forcemains

5-Year 24-Hour Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Alandco
5-year Design Storm

0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan

HC-D4-4_EC-5

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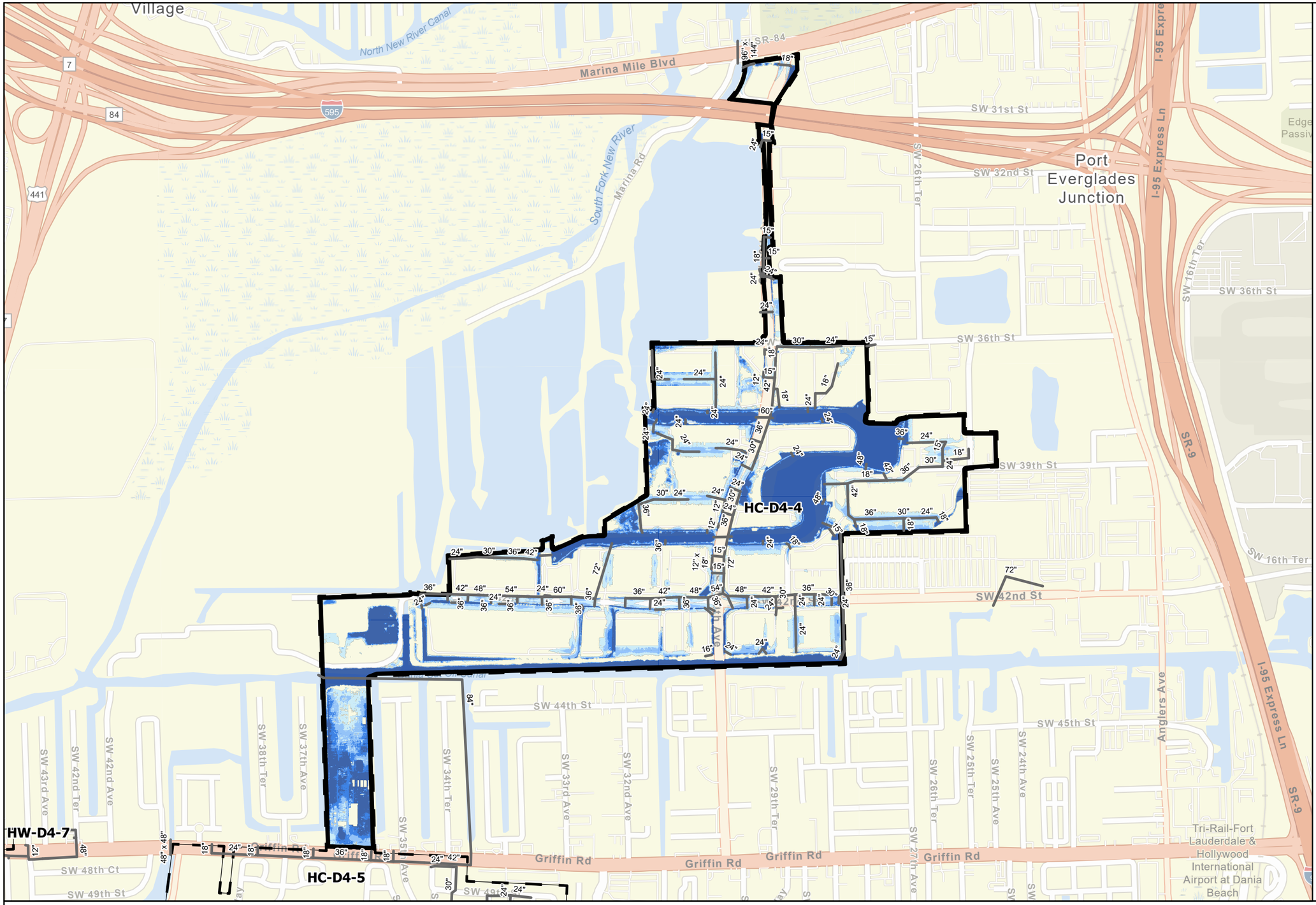

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Existing Gravity Pipes
- Existing Forcemains

10-Year 72-Hour Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Alandco
10-year Design Storm

0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan

HC-D4-4_EC-10

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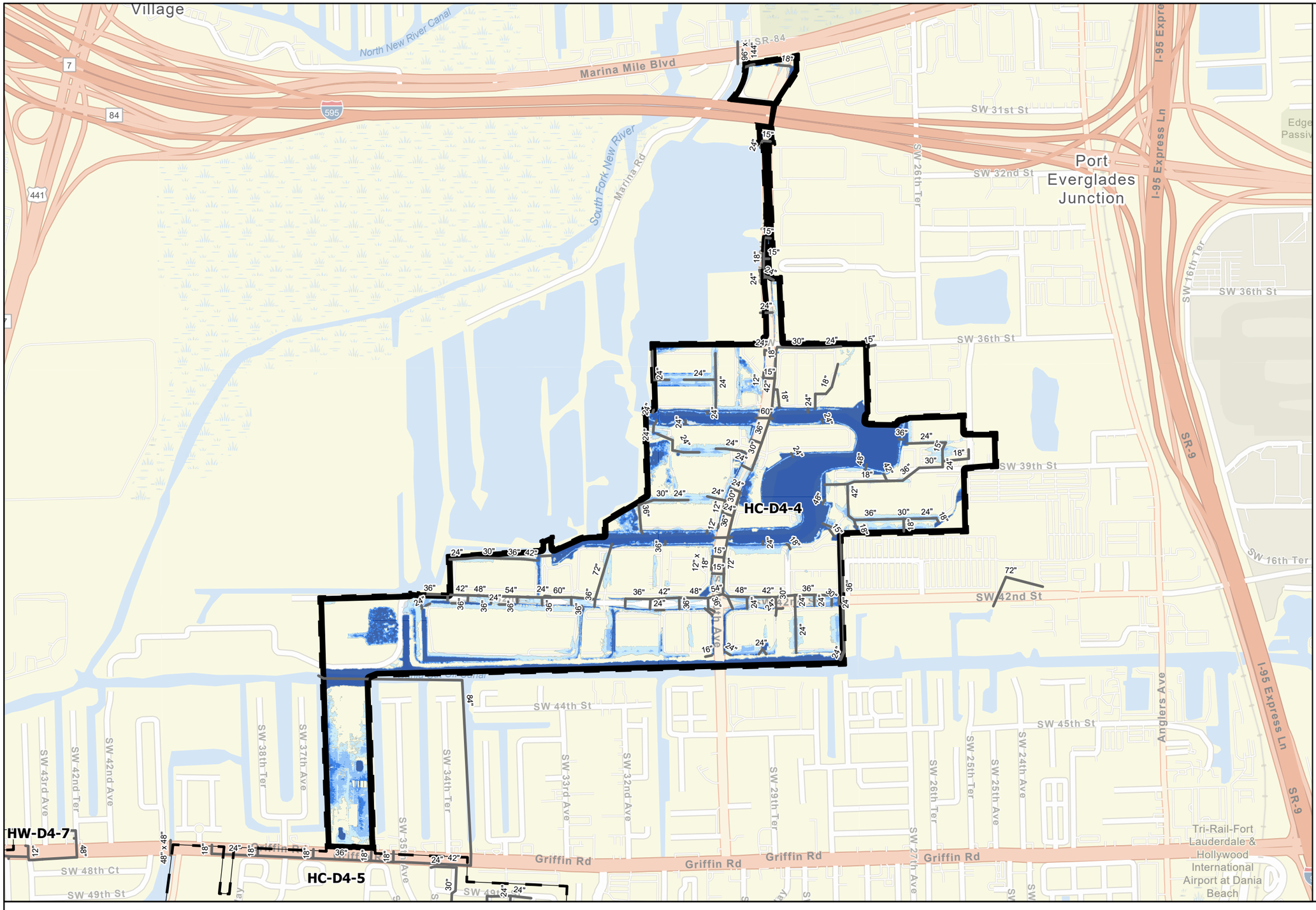


Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area

Alandco

City of Hollywood Stormwater Master Plan

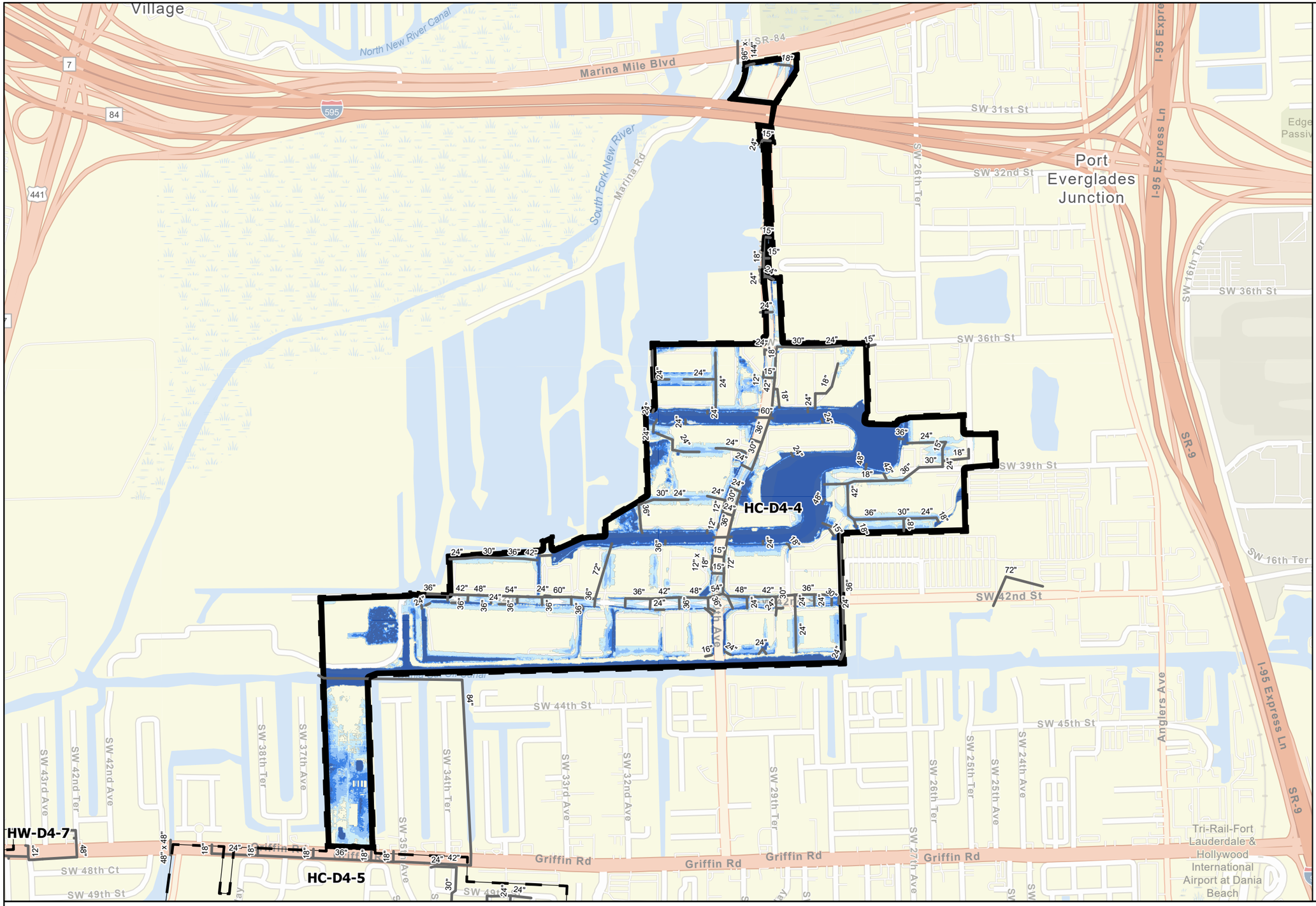
HC-D4-4_ALT1-5

2/28/2023

0 500 1,000 2,000 Feet

1:12,000

SUSINOBM D:\Hollywood SWMP\Final Report Figures\Hollywood Final Report Figures - Map Series\Hollywood Final Report Figures - Map Series.aprx 2/28/2023



Predicted Flooding Reduction and Proposed ALT 1 CIP for 10-year Design Storm in CIP Area

Alandco

City of Hollywood Stormwater Master Plan

HC-D4-4_ALT1-10

2/28/2023

0 500 1,000 2,000 Feet

1:12,000

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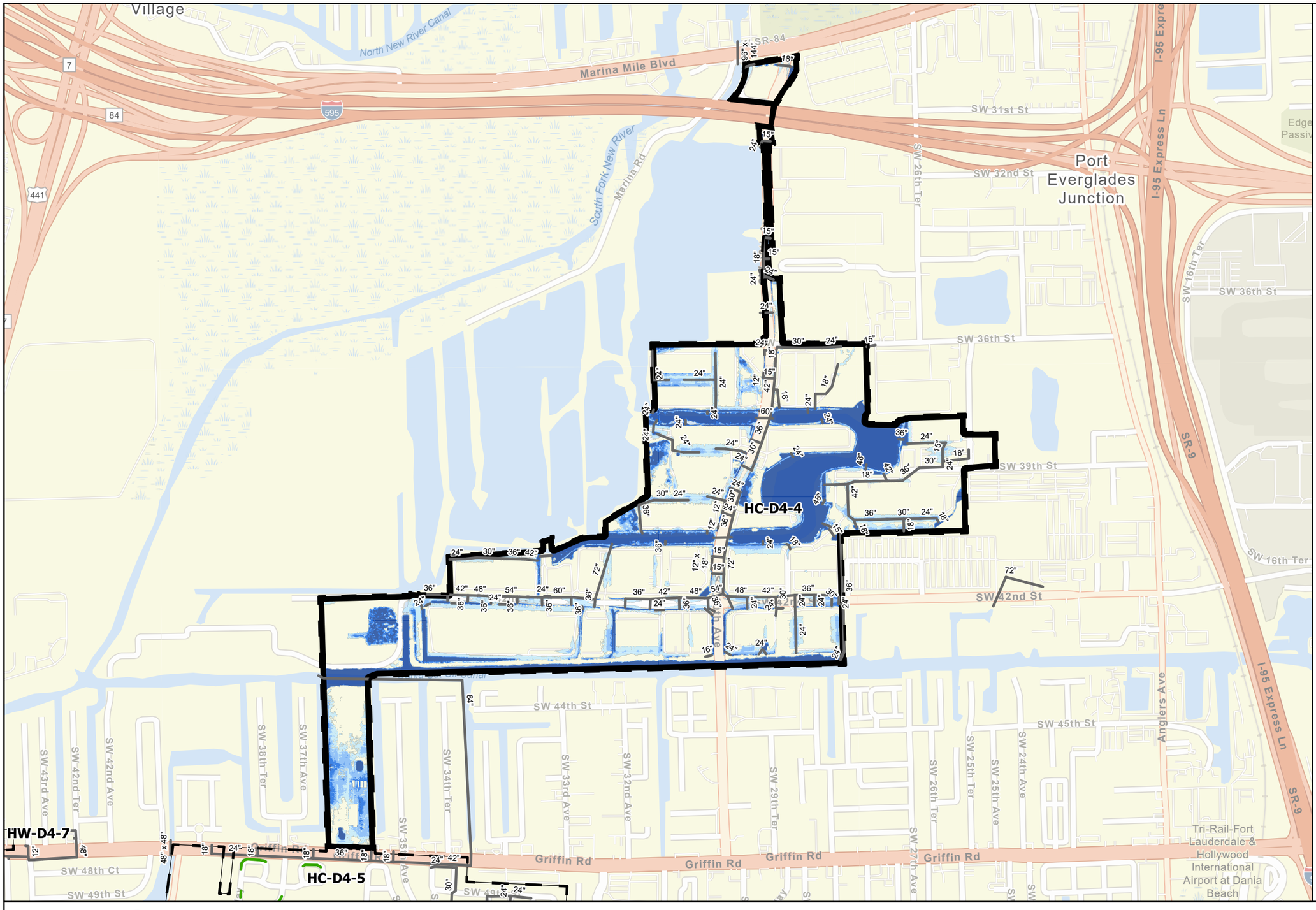


Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Alt 2 SWPS
- Alt 2 Injection Wells
- Existing Gravity Pipes
- Existing Forcemains
- Alt 2 Exfiltration Pipe
- Alt 2 Gravity Pipes
- Alt 2 Forcemains
- Alt 2 Detention Pond

5-Year ALT 2 Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area

Alandco

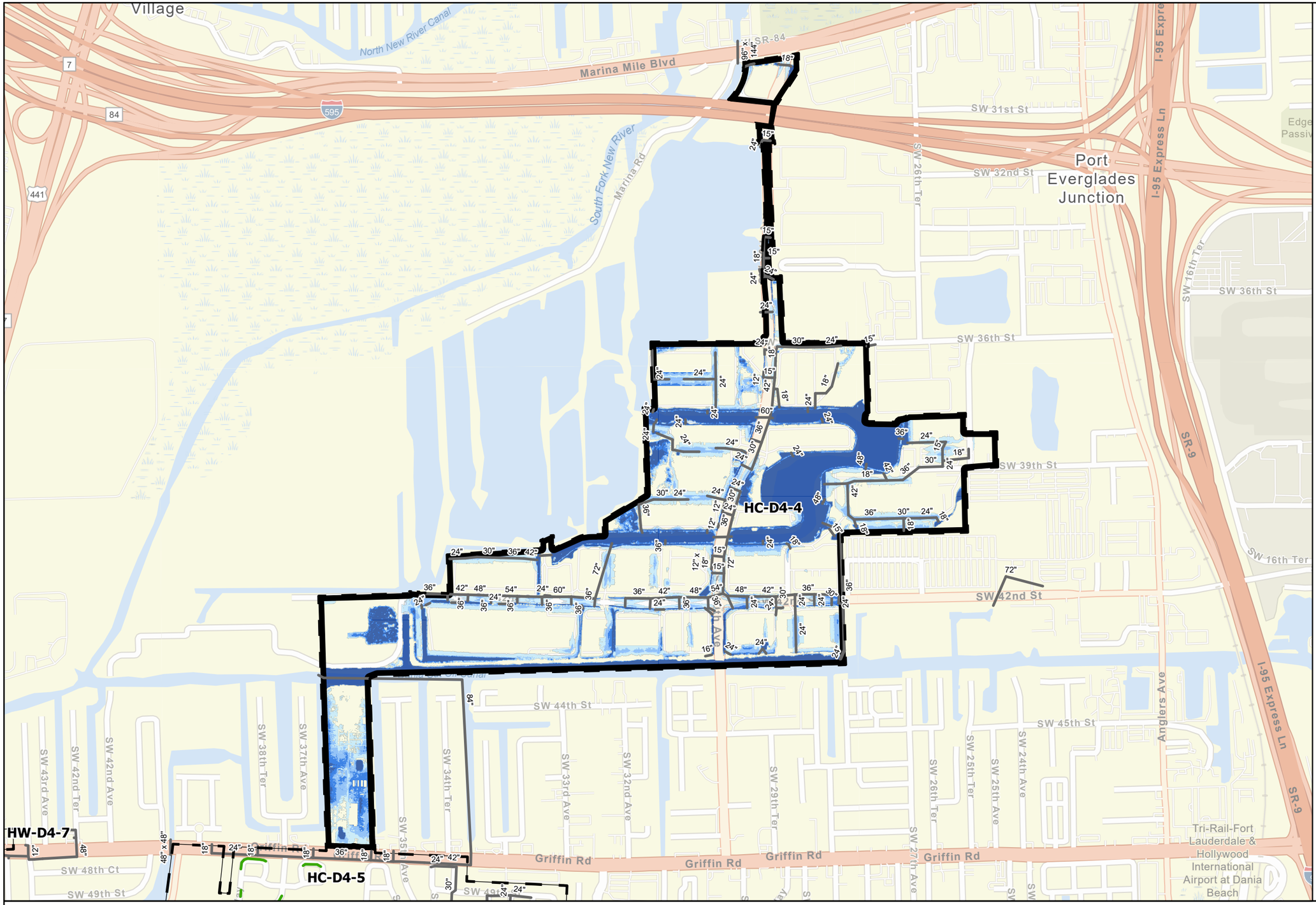
0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan

HC-D4-4_ALT2-5

2/28/2023



Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area

Alandco

City of Hollywood Stormwater Master Plan

HC-D4-4_ALT2-10

2/28/2023

0 500 1,000 2,000 Feet

1:12,000

		CONCEPTUAL CAPITAL COST ESTIMATE					D 4_4 Alandco	
							Alternative 1	
PUMP STATIONS WITH FORCE MAINS								
ITEM #	Master Sheet Index	DIAMETER (INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24	FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36	FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42	FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48	FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54	FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60	FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66	FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72	FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24	FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11		IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12		IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs		I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs		II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs		III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs		IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS			EA	$ 8,000,000.00	0	$ -
AIN SUBTOTAL								$ -
EXFILTRATION WITH GRAVITY MAINS							D 4_4 Alandco	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0020	21	15		GM-Gravity Main Collector	Circular	LF	$ 40.00	0	$ -
0021	22	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	0	$ -
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	0	$ -
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	0	$ -
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	0	$ -
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	0	$ -
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	84	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	0	$ -
0056	50			Weir Box CS		EA	$ 7,500.00	0	$ -
0057	53			CS-22 Remod		EA	$ 200,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0055				Gravity Structures-Inlets		EA	$ 30,000.00	0	$ -
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	0	$ -
							#N/A		
							#N/A		
	GRAVITY MAIN SUBTOTAL						#N/A		$ -
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	0	$ -
							CONSTRUCTION COST SUBTOTAL		**$ -**
GENERAL CONDITIONS								D 4_4 Alandco	
0061		Mobilization				LS	**4%**	$ -	$ -
0062		Insurance and General Conditions				LS	**2%**	$ -	$ -
0063		Permits/Fees				LS	**2%**	$ -	$ -
0064		Maintenance of Traffic				LS	**3%**	$ -	$ -
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ -	$ -
0066		Construction Engineering Inspection Costs				LS	**4%**	$ -	$ -
0067		OCI Management Cost				LS	**15%**	$ -	$ -
0068		Project Contingency Costs				LS	**30%**	$ -	$ -
		Land acquisition							
NS SUBTOTAL									$ -
TOTAL									**$ -**

		CONCEPTUAL CAPITAL COST ESTIMATE						D 4_4 Alandco	
								Alternative 2	
PUMP STATIONS WITH FORCE MAINS									
ITEM #	Master Sheet Index	DIAMETER (INCHES)		DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24		FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36		FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42		FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48		FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54		FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60		FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66		FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72		FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24		FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs			III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs			IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS				EA	$ 8,000,000.00	0	$ -
IN SUBTOTAL									$ -
EXFILTRATION WITH GRAVITY MAINS								D 4_4 Alandco	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0022	22	21		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0021	21	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	0	$ -
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	0	$ -
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	0	$ -
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	0	$ -
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	0	$ -
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	72	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	0	$ -
0055	50			Weir Box CS		EA	$ 30,000.00	0	$ -
0057	53			CS-22 Remod		EA	$ 525,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0056				Gravity Structures-Inlets		EA	$ 7,500.00	0	$ -
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	0	$ -
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
GRAVITY MAIN SUBTOTAL									$ -
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	0	$ -
								CONSTRUCTION COST SUBTOTAL	$ -
GENERAL CONDITIONS								D 4_4 Alandco	
0061		Mobilization				LS	4%	$ -	$ -
0062		Insurance and General Conditions				LS	2%	$ -	$ -
0063		Permits/Fees				LS	2%	$ -	$ -
0064		Maintenance of Traffic				LS	3%	$ -	$ -
0065		Engineering Design & CA Oversight Costs				LS	15%	$ -	$ -
0066		Construction Engineering Inspection Costs				LS	4%	$ -	$ -
0067		OCI Management Cost				LS	15%	$ -	$ -
0068		Project Contingency Costs				LS	30%	$ -	$ -
NS SUBTOTAL									$ -
TOTAL									$ -

- **Figure HC-D4-4-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D4-4-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D4-4-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D4-4-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D4-4_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D4-4_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.3.2 CIP Area HC-D4-5 (Oakridge / Mapleridge)

Root Causes of Flooding

This CIP area is characterized by mostly built-out, residential land use with multiple, interconnected lakes, and is mostly private developments. Flooding in larger storms occurs within the private development's systems.

Alternatives 1 & 2

Proposed CIP:

- New 1,309 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 and 2 LOS:

1. Structures Flooded pre-0, post-0
2. SW 35th Avenue, entrance to Oakridge private homes, road dips too low raise to match the existing road elevations on either side approximately 500 ft.

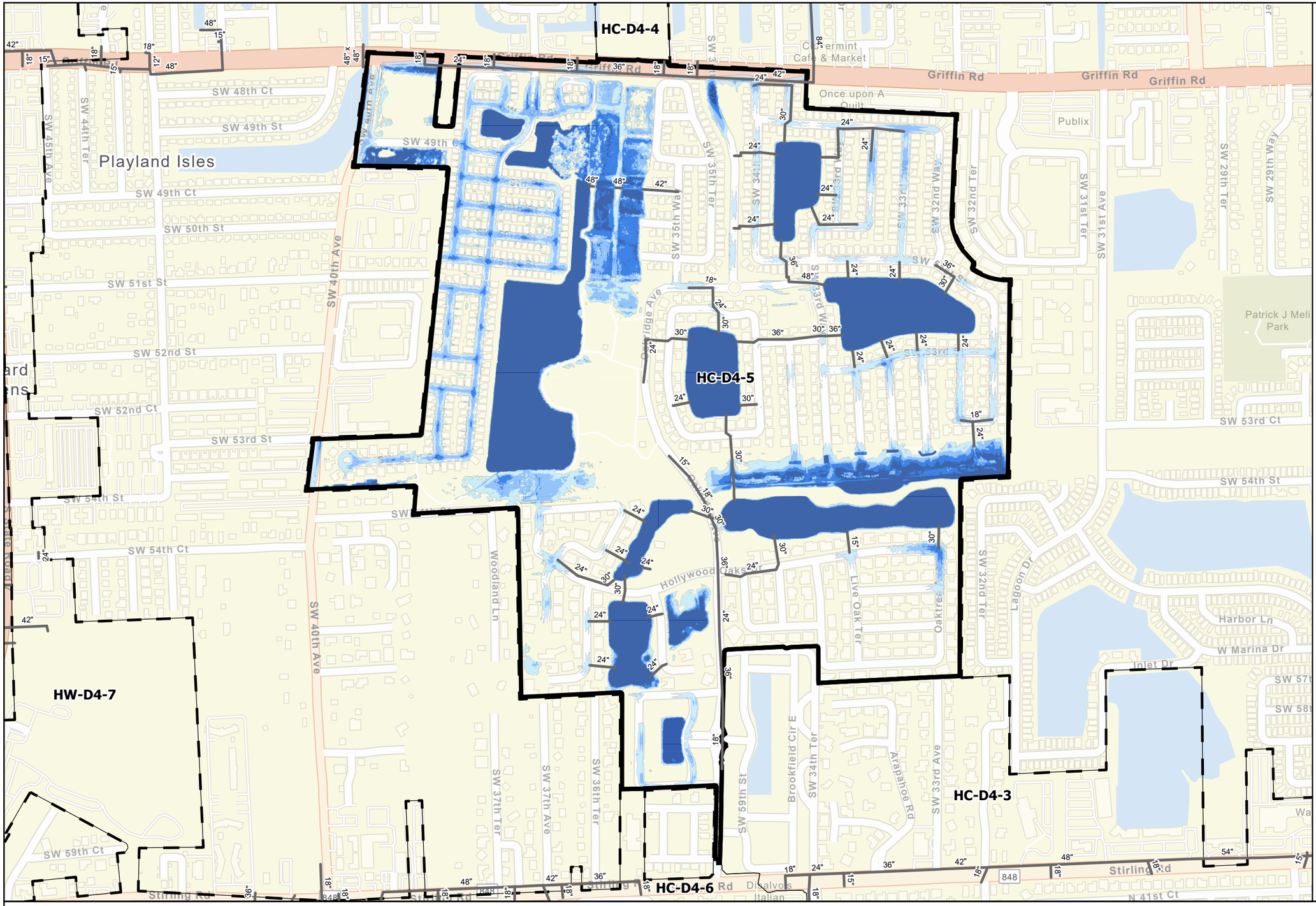
Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D4-5 Pre-Post CIP Flood Inundation Maps

The following figures provide the predicted existing conditions flooding for the 5- and 10-year storm in the CIP Area and the predicted flood reduction for these storms under the Alternatives 1 and 2 CIP:

- **Figure HC-D4-5-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D4-5-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D4-5-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**



Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Existing Gravity Pipes
- Existing Forcemains

5-Year 24-Hour Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Oakridge / Mapleridge
5-year Design Storm

CDM Smith

CITY OF Hollywood FLORIDA

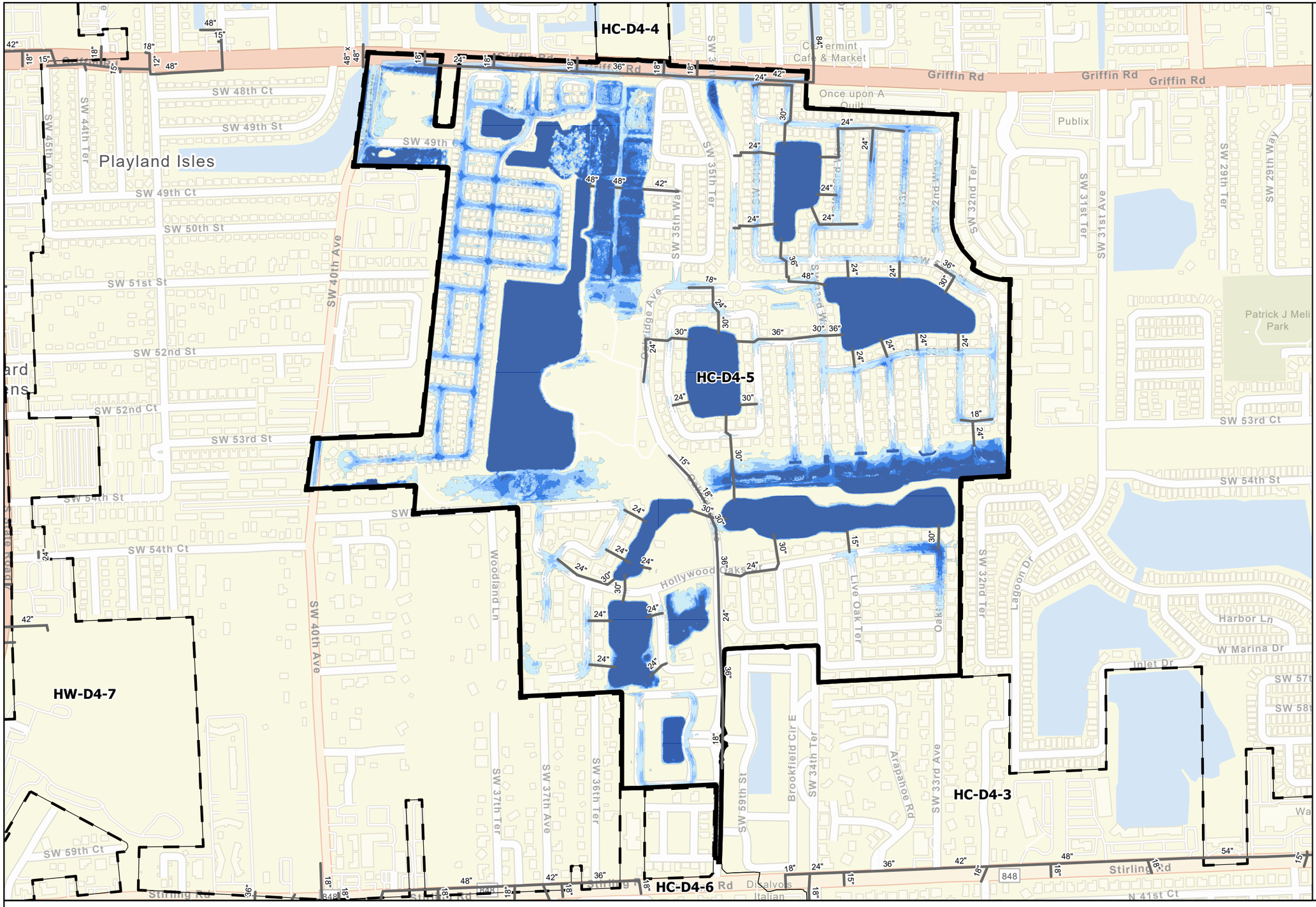
0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-5_EC-5

2/28/2023



Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Existing Gravity Pipes
- Existing Forcemains

10-Year 72-Hour Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Oakridge / Mapleridge
10-year Design Storm

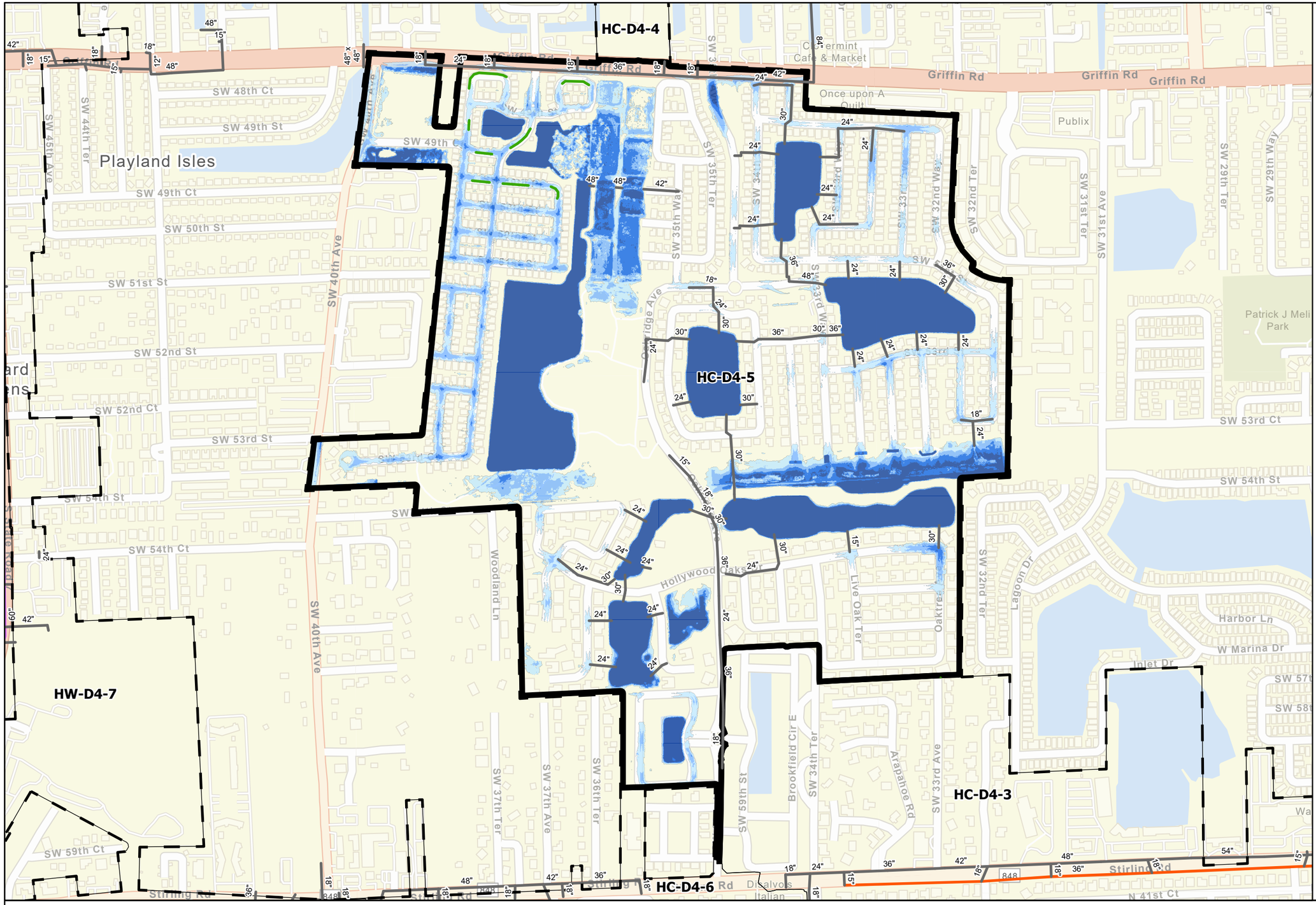
0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-5_EC-10

2/28/2023



Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area
Oakridge / Mapleridge

City of Hollywood Stormwater Master Plan
HC-D4-5_ALT1-5
2/28/2023

0 337.5 675 1,350 Feet
1:8,000

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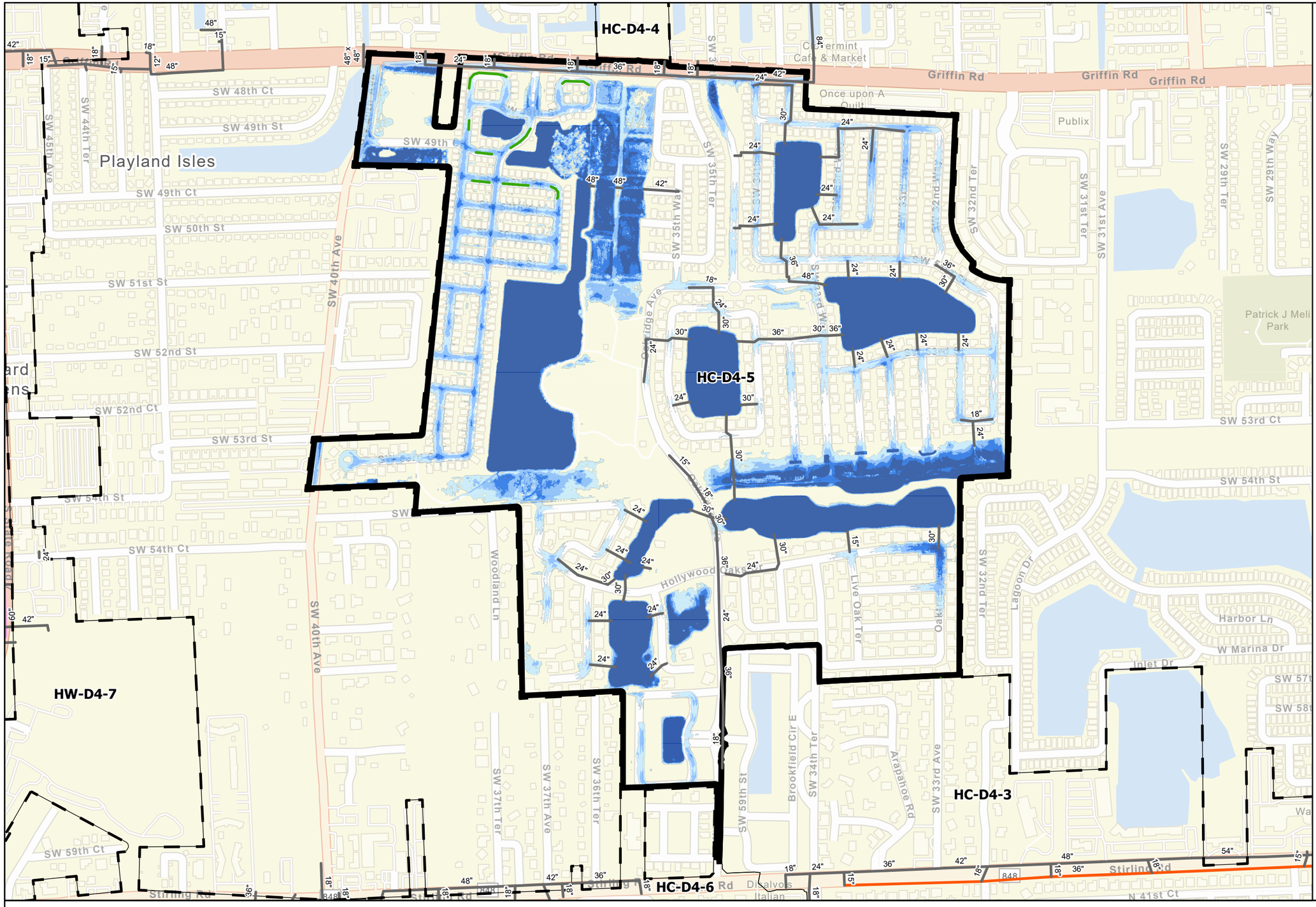


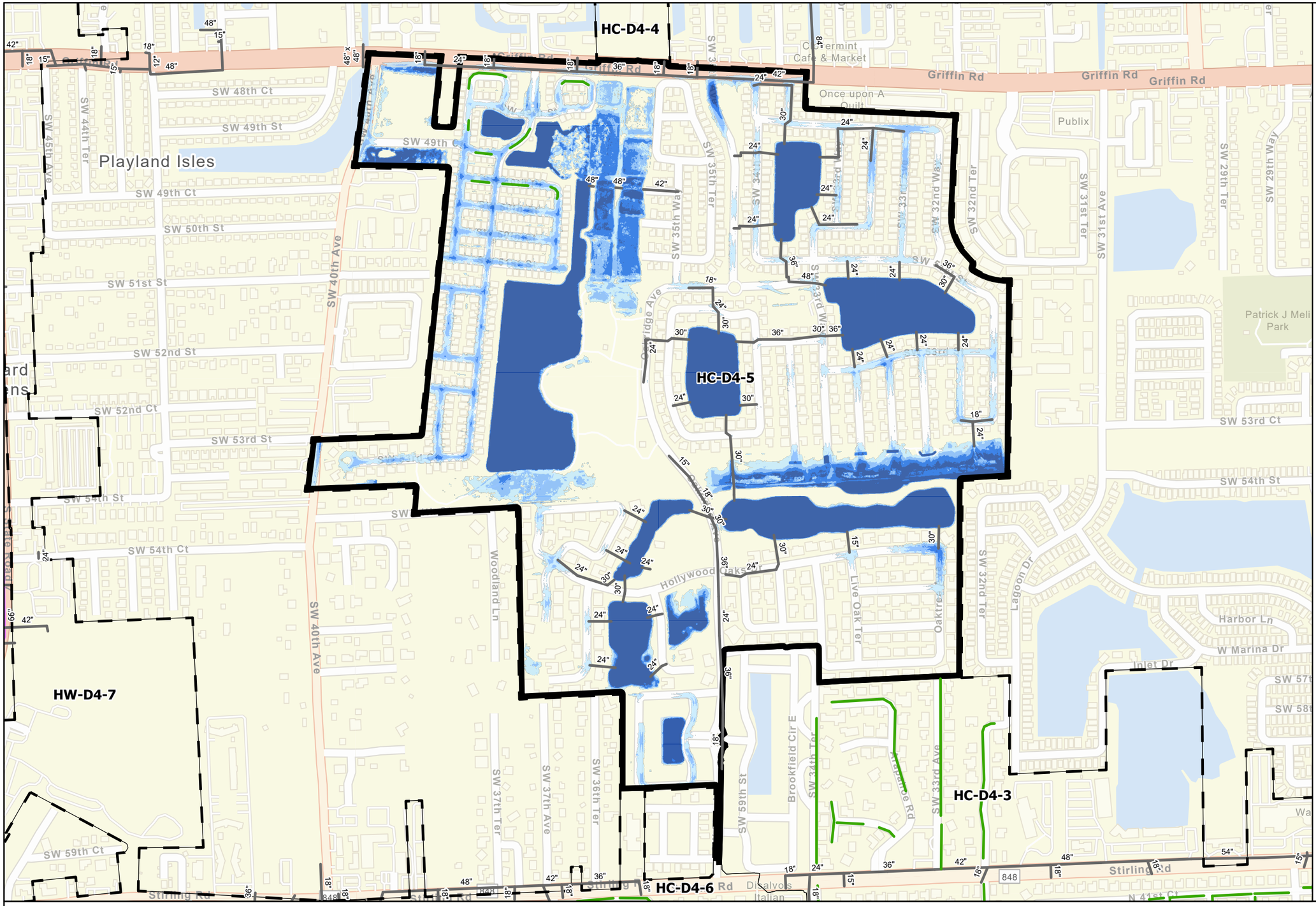
Predicted Flooding Reduction and Proposed ALT 1 CIP for 10-year Design Storm in CIP Area
Oakridge / Mapleridge

CDM Smith
CITY OF Hollywood FLORIDA

0 337.5 675 1,350 Feet
1:8,000

City of Hollywood Stormwater Master Plan
HC-D4-5_ALT1-10
2/28/2023

SUSINOBM D:\Hollywood SWMP\Final Report Figures\Hollywood Final Report Figures - Map Series\Hollywood Final Report Figures - Map Series.aprx 2/28/2023



Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area
Oakridge / Mapleridge

City of Hollywood Stormwater Master Plan
HC-D4-5_ALT2-5
2/28/2023

0 337.5 675 1,350 Feet
1:8,000

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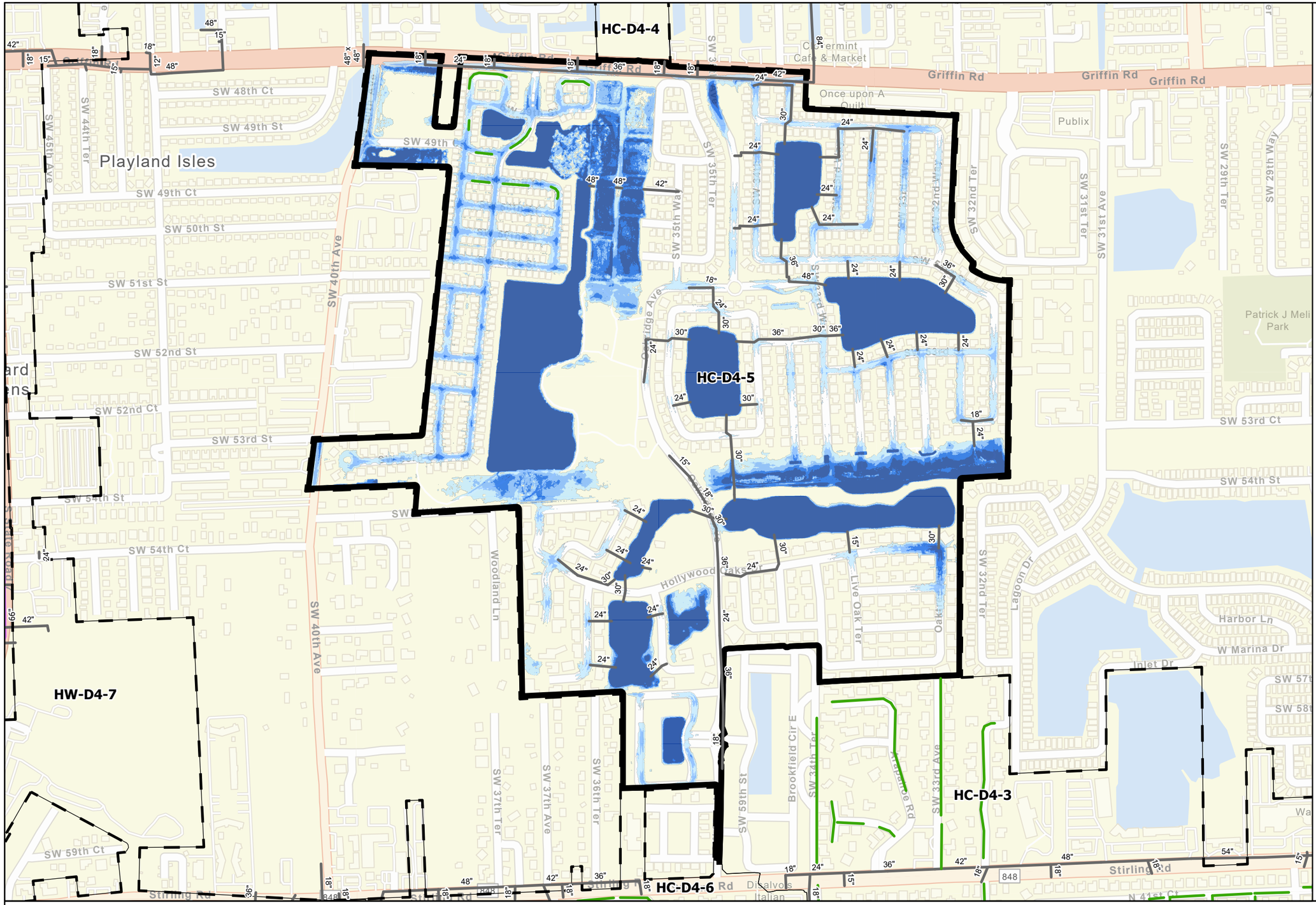

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Alt 2 SWPS
- Alt 2 Injection Wells
- Existing Gravity Pipes
- Existing Forcemains
- Alt 2 Exfiltration Pipe
- Alt 2 Gravity Pipes
- Alt 2 Forcemains
- Alt 2 Detention Pond

10-Year ALT 2 Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

CDM Smith

CITY OF Hollywood FLORIDA

Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area
Oakridge / Mapleridge

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-5_ALT2-10

2/28/2023

		CONCEPTUAL CAPITAL COST ESTIMATE						Oakridge and Mapleridge	
								Alternative 1	
PUMP STATIONS WITH FORCE MAINS									
ITEM #	Master Sheet Index	DIAMETER (INCHES)		DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24		FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36		FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42		FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48		FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54		FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60		FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66		FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72		FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24		FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs			III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs			IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS				EA	$ 8,000,000.00	0	$ -
AIN SUBTOTAL									$ -
EXFILTRATION WITH GRAVITY MAINS								Oakridge and Mapleridge	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0020	21	15		GM-Gravity Main Collector	Circular	LF	$ 40.00	0	$ -
0021	22	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	0	$ -
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	0	$ -
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	0	$ -
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	0	$ -
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	0	$ -
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	84	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	1,309	$ 327,250
0056	50			Weir Box CS		EA	$ 7,500.00	0	$ -
0057	53			CS-22 Remod		EA	$ 200,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0055				Gravity Structures-Inlets		EA	$ 30,000.00	11	$ 327,250
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	0	$ -
							#N/A		
							#N/A		
	GRAVITY MAIN SUBTOTAL						#N/A		$ 654,500
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	1,309	$ 353,430
								CONSTRUCTION COST SUBTOTAL	**$ 1,007,930**
GENERAL CONDITIONS								Oakridge and Mapleridge	
0061		Mobilization				LS	**4%**	$ 1,007,930	$ 40,317
0062		Insurance and General Conditions				LS	**2%**	$ 1,007,930	$ 20,159
0063		Permits/Fees				LS	**2%**	$ 1,007,930	$ 20,159
0064		Maintenance of Traffic				LS	**3%**	$ 1,007,930	$ 30,238
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 1,007,930	$ 151,190
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 1,007,930	$ 40,317
0067		OCI Management Cost				LS	**15%**	$ 1,007,930	$ 151,190
0068		Project Contingency Costs				LS	**30%**	$ 1,007,930	$ 302,379
		Land acquisition							
NS SUBTOTAL									$ 755,948
TOTAL									**$ 1,763,878**

		CONCEPTUAL CAPITAL COST ESTIMATE						Oakridge and Mapleridge	
								Alternative 2	
PUMP STATIONS WITH FORCE MAINS									
ITEM #	Master Sheet Index	DIAMETER (INCHES)		DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24		FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36		FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42		FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48		FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54		FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60		FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66		FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72		FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24		FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs			III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs			IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS				EA	$ 8,000,000.00	0	$ -
IN SUBTOTAL									$ -
EXFILTRATION WITH GRAVITY MAINS								Oakridge and Mapleridge	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0022	22	21		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0021	21	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	0	$ -
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	0	$ -
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	0	$ -
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	0	$ -
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	0	$ -
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	72	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	1,309	$ 327,250
0055	50			Weir Box CS		EA	$ 30,000.00	0	$ -
0057	53			CS-22 Remod		EA	$ 525,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0056				Gravity Structures-Inlets		EA	$ 7,500.00	11	$ 81,813
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	0	$ -
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL								$ 409,063
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	1,309	$ 353,430
							CONSTRUCTION COST SUBTOTAL		$ 762,493
GENERAL CONDITIONS								Oakridge and Mapleridge	
0061		Mobilization				LS	4%	$ 762,493	$ 30,500
0062		Insurance and General Conditions				LS	2%	$ 762,493	$ 15,250
0063		Permits/Fees				LS	2%	$ 762,493	$ 15,250
0064		Maintenance of Traffic				LS	3%	$ 762,493	$ 22,875
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 762,493	$ 114,374
0066		Construction Engineering Inspection Costs				LS	4%	$ 762,493	$ 30,500
0067		OCI Management Cost				LS	15%	$ 762,493	$ 114,374
0068		Project Contingency Costs				LS	30%	$ 762,493	$ 228,748
NS SUBTOTAL									$ 571,869
TOTAL									$ 1,334,362

- **Figure HC-D4-5-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D4-5-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D4-5-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D4-5_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D4-5_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.3.3 CIP Area HC-D4-6 (Emerald Hills)

Root Causes of Flooding

This CIP area is characterized by mostly built-out, mixed commercial and residential land use, and golf course and parks, located upstream of the BC CS-22 structure on the C-10 spur. The area has insufficient and undersized existing local drainage systems. Water flows from higher surrounding areas such as Hollywood Hills toward Sheridan St as part of an existing historic floodplain and into this sub basin and collects as flooding.

Alternative 1

Proposed CIP:

- Regional Improvement Concept: CS-22 Control Structure Upgrade and New Forward Pumping SWPS – In order to take advantage of the existing lake storage (currently under-utilized for stormwater management) in the area and west of 56th Ave, it is proposed that the abandoned, existing, Broward County control structure CS-22 be acquired by the City, upgraded and automated, and new pumps be added to lower the lake levels behind the structure pre-storm to create storage and be able to manage the stormwater runoff generated in the service areas:

1. Upgrade of CS-22 control structure from the existing three 3 inoperable gates to backflow prevention on the existing triple 66" culverts.
2. Installation of a new weir across the canal at the structure and on either side to meet the existing land surface top EL of 7 ft NAVD (i.e., EL 6 ft NAVD plus one foot of freeboard) to direct normal flow into the culverts and prevent tidal influence upstream.
3. New SWPS with five (1 redundant) staggered capacity pumps with a total capacity of 450 cfs pumping over the structure downstream towards the C-10 canal located in the canal R/O/W where the current structure exists at N 46th Ave. operating pre-storm to create needed storage upstream of the weir and during the storm based on level control maintaining a normal WSE just above the GWEL (approx. EL 1 NAVD).

For the remainder of the CIP area:

- New gravity collection systems and inlets in CIP neighborhoods.

- New 18,850 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-6, post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- Remove the inoperable CS-22 control gates and install backflow prevention in the existing triple 66-inch culverts and raise the sidewalk (berm) to EL 5 NAVD in both the north and south directions on the east side of N 46th Ave to meet the seawall ordinance height and prevent tidal flooding in the neighborhoods upstream. Note: the new large forward pumping SWPS from ALT 1 at the structure is deleted in this alternative.
- New gravity collection systems and inlets in the CIP area neighborhoods.
- New 14,020 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-6, post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D4-6 Pre-Post CIP Flood Inundation Maps

The following figures provide the predicted existing conditions flooding for the 5- and 10-year storm in the CIP Area and the predicted flood reduction for these storms under the Alternatives 1 and 2 CIP:

- **Figure HC-D4-6-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D4-6-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D4-6-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D4-6-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D4-6-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D4-6-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**

HC-D4-5

HC-D4-6

HC-D4-3

HW-D4-7

HW-D4-8

HC-D3-5

HC-D4-2

HC-D3-3-4

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Existing Gravity Pipes
- Existing Forcemains

5-Year 24-Hour Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Emerald Hills / Playland / 441 Corridor Central / Hollywood Hills
5-year Design Storm

0 380 760 1,520 Feet

1:9,000

City of Hollywood Stormwater Master Plan

HC-D4-6_EC-5

2/28/2023

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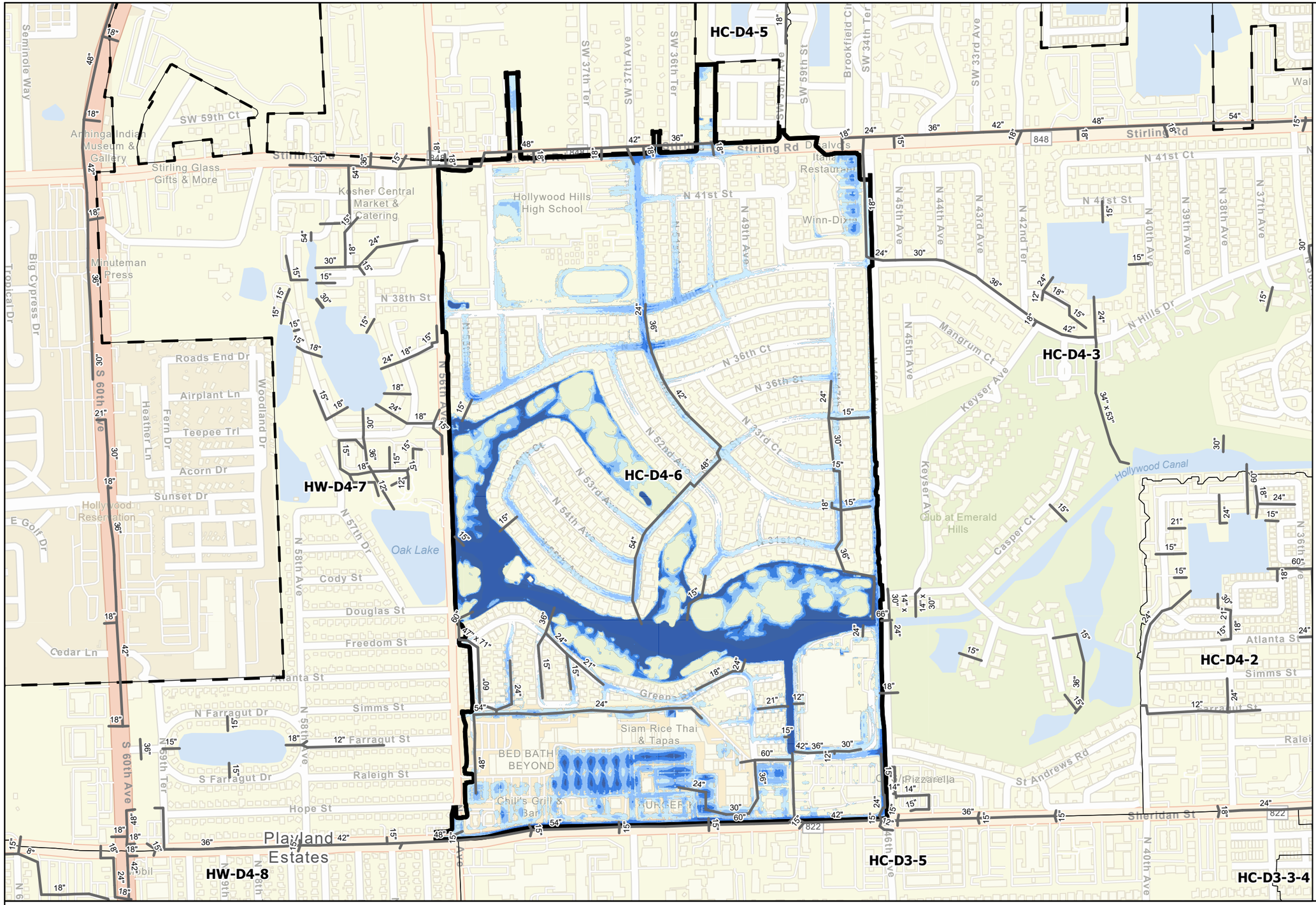

Current Conditions Flooding in CIP Area
Emerald Hills / Playland / 441 Corridor Central / Hollywood Hills
10-year Design Storm

City of Hollywood Stormwater Master Plan
HC-D4-6_EC-10
2/28/2023

0 380 760 1,520 Feet
1:9,000

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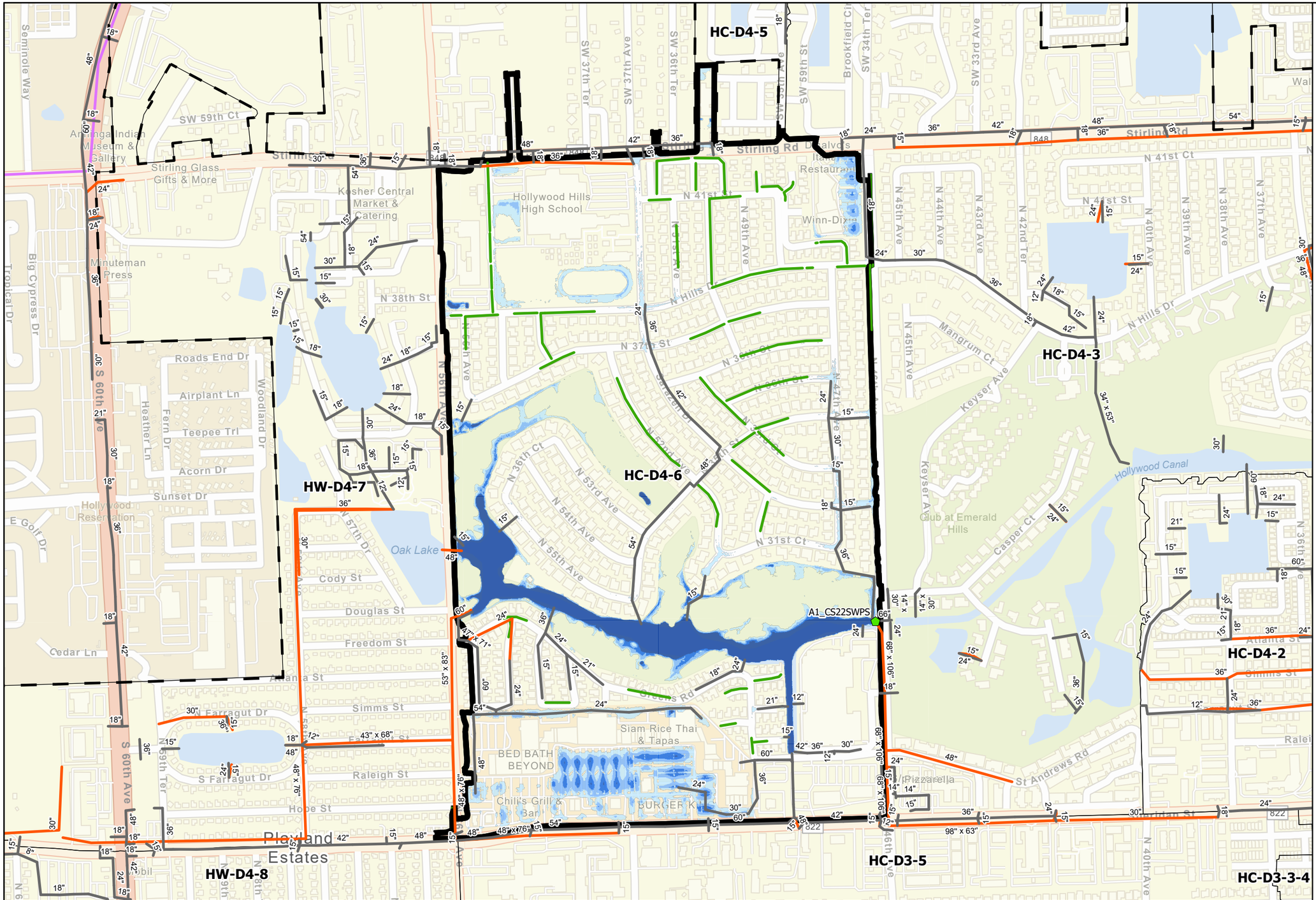

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CITY OF Hollywood FLORIDA

Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area

Emerald Hills / Playland / 441 Corridor Central / Hollywood Hills

0 380 760 1,520 Feet

1:9,000

City of Hollywood Stormwater Master Plan

HC-D4-6_ALT1-5

2/28/2023

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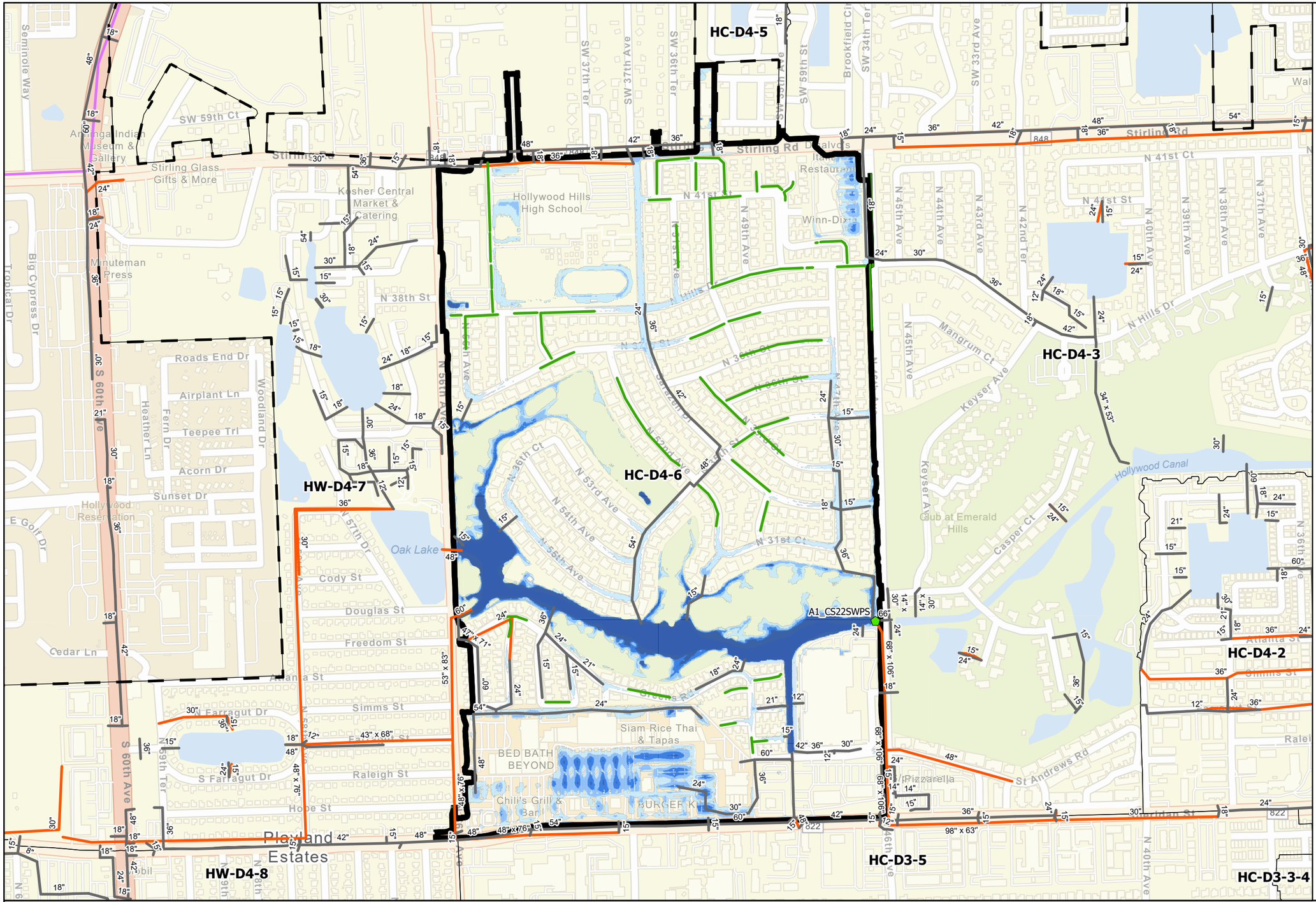

Predicted Flooding Reduction and Proposed ALT 1 CIP for 10-year Design Storm in CIP Area

Emerald Hills / Playland / 441 Corridor Central / Hollywood Hills

0 380 760 1,520 Feet

1:9,000

City of Hollywood Stormwater Master Plan

HC-D4-6_ALT1-10

2/28/2023

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HC-D4-5
HC-D4-6
HC-D4-3
HW-D4-7
HW-D4-8
HC-D3-5
HC-D4-2
HC-D3-3-4

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Alt 2 SWPS
- Alt 2 Injection Wells
- Existing Gravity Pipes
- Existing Forcemains
- Alt 2 Exfiltration Pipe
- Alt 2 Gravity Pipes
- Alt 2 Forcemains
- Alt 2 Detention Pond

5-Year ALT 2 Storm Flood Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

CDM Smith

CITY OF Hollywood FLORIDA

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area
Emerald Hills / Playland / 441 Corridor Central / Hollywood Hills

0 380 760 1,520 Feet

1:9,000

City of Hollywood Stormwater Master Plan
HC-D4-6_ALT2-5
2/28/2023

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HC-D4-5
HC-D4-3
HC-D4-6
HW-D4-7
HC-D4-2
HC-D3-5
HW-D4-8
HC-D3-3-4

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Alt 2 SWPS
- Alt 2 Injection Wells
- Existing Gravity Pipes
- Existing Forcemains
- Alt 2 Exfiltration Pipe
- Alt 2 Gravity Pipes
- Alt 2 Forcemains
- Alt 2 Detention Pond

10-Year ALT 2 Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

CDM Smith

CITY OF Hollywood FLORIDA

Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area
Emerald Hills / Playland / 441 Corridor Central / Hollywood Hills

0 380 760 1,520 Feet

1:9,000

City of Hollywood Stormwater Master Plan

HC-D4-6_ALT2-10

2/28/2023

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		CONCEPTUAL CAPITAL COST ESTIMATE						Emerald Hills	
								Alternative 1	
PUMP STATIONS WITH FORCE MAINS									
ITEM #	Master Sheet Index	DIAMETER (INCHES)		DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24		FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36		FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42		FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48		FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54		FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60		FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66		FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72		FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24		FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs			III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs			IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS				EA	$ 8,000,000.00	1	$ 8,000,000
AIN SUBTOTAL									$ -
EXFILTRATION WITH GRAVITY MAINS								Emerald Hills	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0020	21	15		GM-Gravity Main Collector	Circular	LF	$ 40.00	0	$ -
0021	22	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	715	$ 34,320
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	1,195	$ 95,600
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	0	$ -
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	0	$ -
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	0	$ -
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	1,175	$ 540,500
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	84	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	200	$ 170,000
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	18,847	$ 4,711,750
0056	50			Weir Box CS		EA	$ 7,500.00	0	$ -
0057	53			CS-22 Remod		EA	$ 200,000.00	1	$ 200,000
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0055				Gravity Structures-Inlets		EA	$ 30,000.00	184	$ 5,513,000
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	0	$ -
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
GRAVITY MAIN SUBTOTAL							#N/A		$ 11,265,170
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	22,132	$ 5,975,640
								CONSTRUCTION COST SUBTOTAL	**$ 17,240,810**
GENERAL CONDITIONS								Emerald Hills	
0061		Mobilization				LS	**4%**	$ 17,240,810	$ 689,632
0062		Insurance and General Conditions				LS	**2%**	$ 17,240,810	$ 344,816
0063		Permits/Fees				LS	**2%**	$ 17,240,810	$ 344,816
0064		Maintenance of Traffic				LS	**3%**	$ 17,240,810	$ 517,224
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 17,240,810	$ 2,586,122
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 17,240,810	$ 689,632
0067		OCI Management Cost				LS	**15%**	$ 17,240,810	$ 2,586,122
0068		Project Contingency Costs				LS	**30%**	$ 17,240,810	$ 5,172,243
		Land acquisition							
NS SUBTOTAL									$ 12,930,608
TOTAL									**$ 30,171,418**

		CONCEPTUAL CAPITAL COST ESTIMATE						Emerald Hills	
								Alternative 2	
PUMP STATIONS WITH FORCE MAINS									
ITEM #	Master Sheet Index	DIAMETER (INCHES)		DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0001	13	24		FM- Force Main Collector	Circular	LF	$ 167.00	0	$ -
0002	14	36		FM- Force Main Collector	Circular	LF	$ 242.00	0	$ -
0003	15	42		FM- Force Main Collector	Circular	LF	$ 336.00	0	$ -
0004	16	48		FM- Force Main Collector	Circular	LF	$ 612.00	0	$ -
0005	17	54		FM- Force Main Collector	Circular	LF	$ 982.00	0	$ -
0006	18	60		FM- Force Main Collector	Circular	LF	$ 1,149.00	0	$ -
0007	19	66		FM- Force Main Collector	Circular	LF	$ 1,329.00	0	$ -
0008	20	72		FM- Force Main Collector	Circular	LF	$ 1,473.00	0	$ -
0009	225	24		FMO- Force Main Offline	Circular	LF	$ 353.00	0	$ -
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	0	$ -
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	0	$ -
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	0	$ -
0014	8	PS-Storm Drainage Pump Stations < 246-328 cfs			III	EA	$ 4,900,000.00	0	$ -
0015	9	PS-Storm Drainage Pump Stations< 328-410 cfs			IV	EA	$ 6,750,000.00	0	$ -
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS				EA	$ 8,000,000.00	0	$ -
IN SUBTOTAL									$ -
EXFILTRATION WITH GRAVITY MAINS								Emerald Hills	
ITEM #	Master Sheet Index	DIAMETER (INCHES)	Width(INCHES)	DESCRIPTION	TYPE	UNIT	UNIT COST	QUANTITIES	SUBTOTAL
0022	22	21		GM-Gravity Main Collector	Circular	LF	$ 45.00	0	$ -
0021	21	18		GM-Gravity Main Collector	Circular	LF	$ 45.00	35	$ 1,575
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	715	$ 34,320
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	1,195	$ 62,140
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	0	$ -
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	0	$ -
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	0	$ -
0031	29	60		GM-Gravity Main Collector	Circular	LF	$ 220.00	0	$ -
0032	30	66		GM-Gravity Main Collector	Circular	LF	$ 428.00	0	$ -
0033	31	72		GM-Gravity Main Collector	Circular	LF	$ 485.00	0	$ -
0035	32	29	45	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 205.00	0	$ -
0036	33	32	49	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 215.00	0	$ -
0037	34	34	53	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 225.00	0	$ -
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	0	$ -
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	0	$ -
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	0	$ -
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	0	$ -
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	1,175	$ 481,750
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	72	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	3	$ 210,000
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	14,021	$ 3,505,250
0055	50			Weir Box CS		EA	$ 30,000.00	0	$ -
0057	53			CS-22 Remod		EA	$ 525,000.00	1	$ 525,000
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0056				Gravity Structures-Inlets		EA	$ 7,500.00	143	$ 1,071,313
0059	56			Ditch Improvement		LF	$ 50.00	0	$ -
0091	57			Swale/Ditch Headwall		Ea	$ 10,000.00	0	$ -
0090	10			Exfil_End Weir		Ea	$ 5,000.00	0	$ -
0092	51			Ret/Det Pond		CUY	$ 355.00	0	$ -
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL								$ 5,891,348
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	17,141	$ 4,628,070
							CONSTRUCTION COST SUBTOTAL		$ 10,519,418
GENERAL CONDITIONS								Emerald Hills	
0061		Mobilization				LS	4%	$ 10,519,418	$ 420,777
0062		Insurance and General Conditions				LS	2%	$ 10,519,418	$ 210,388
0063		Permits/Fees				LS	2%	$ 10,519,418	$ 210,388
0064		Maintenance of Traffic				LS	3%	$ 10,519,418	$ 315,583
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 10,519,418	$ 1,577,913
0066		Construction Engineering Inspection Costs				LS	4%	$ 10,519,418	$ 420,777
0067		OCI Management Cost				LS	15%	$ 10,519,418	$ 1,577,913
0068		Project Contingency Costs				LS	30%	$ 10,519,418	$ 3,155,825
NS SUBTOTAL									$ 7,889,563
TOTAL									$ 18,408,981

- **Table HC-D4-6_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D4-6_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.4 CIP Area HC-D4-3 (Emerald Hills / Stirling Commercial District)

Root Causes of Flooding

This CIP area is characterized by mostly built-out, mixed commercial and residential land use, and golf course and parks. There is a series of interconnected lakes with overflows draining to the canal, but the water does not move at a sufficient rate to avoid flooding. Sheridan St (FDOT) has a low spot and an undersized system and floods deeply at N 46th Ave.

Alternative 1

Proposed CIP:

- New gravity collection systems and inlets in CIP neighborhoods connecting the existing lakes and ponds, and in the lower parts of the neighborhood, directing flow to the C-10 canal including BFPs in the pipes at the outfalls.
- New 14,880 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-5, post-1

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- New gravity collection systems and inlets in CIP neighborhoods connecting the existing lakes and ponds, and in the lower parts of the neighborhood directing flow to the C-10 canal including BFPs in the outfall pipes.
- New 13,135 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-5, post-2

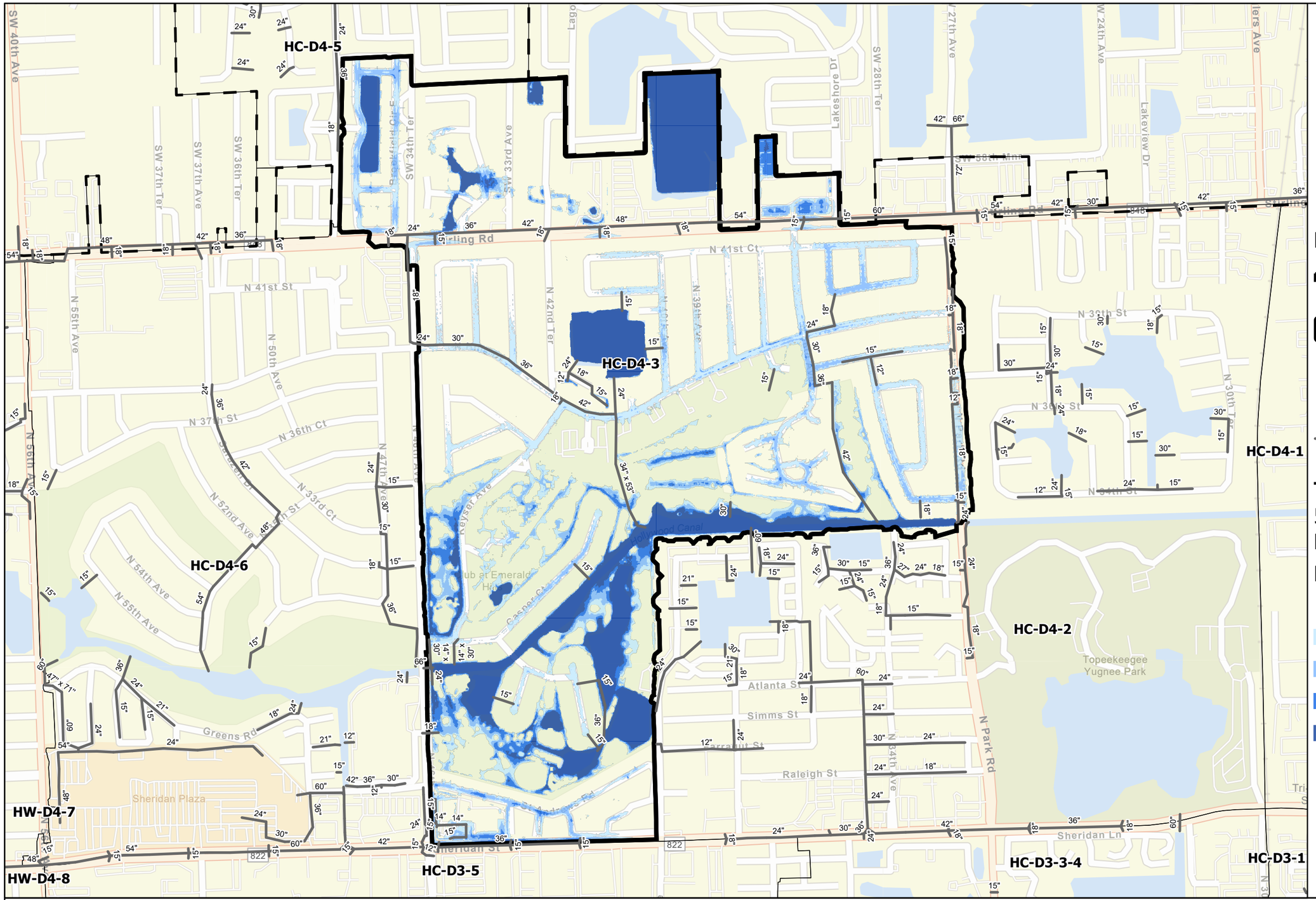
Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D4-3 Pre-Post CIP Flood Inundation Maps

The following figures provide the predicted existing conditions flooding for the 5- and 10-year storm in the CIP Area and the predicted flood reduction for these storms under the Alternatives 1 and 2 CIP:

- **Figure HC-D4-3-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**



Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Existing Gravity Pipes
- Existing Forcemains

5-Year 24-Hour Storm Flood

Feet

- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Emerald Hills / Stirling Commercial District
5-year Design Storm

0 425 850 1,700 Feet

1:10,000

City of Hollywood Stormwater Master Plan

HC-D4-3_EC-5

2/28/2023

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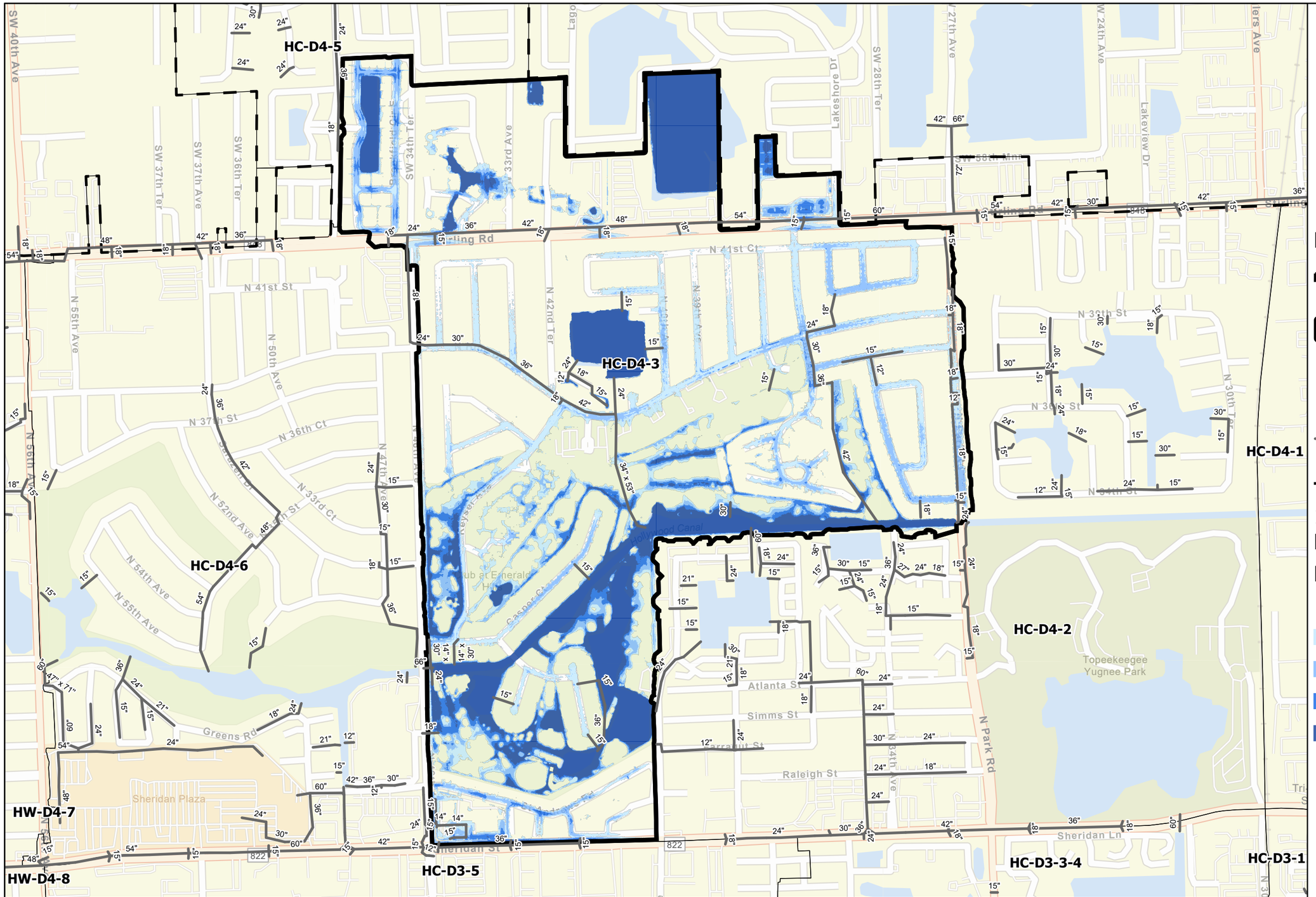

Current Conditions Flooding in CIP Area
Emerald Hills / Stirling Commercial District
10-year Design Storm

City of Hollywood Stormwater Master Plan
HC-D4-3_EC-10
2/28/2023

0 425 850 1,700 Feet
1:10,000

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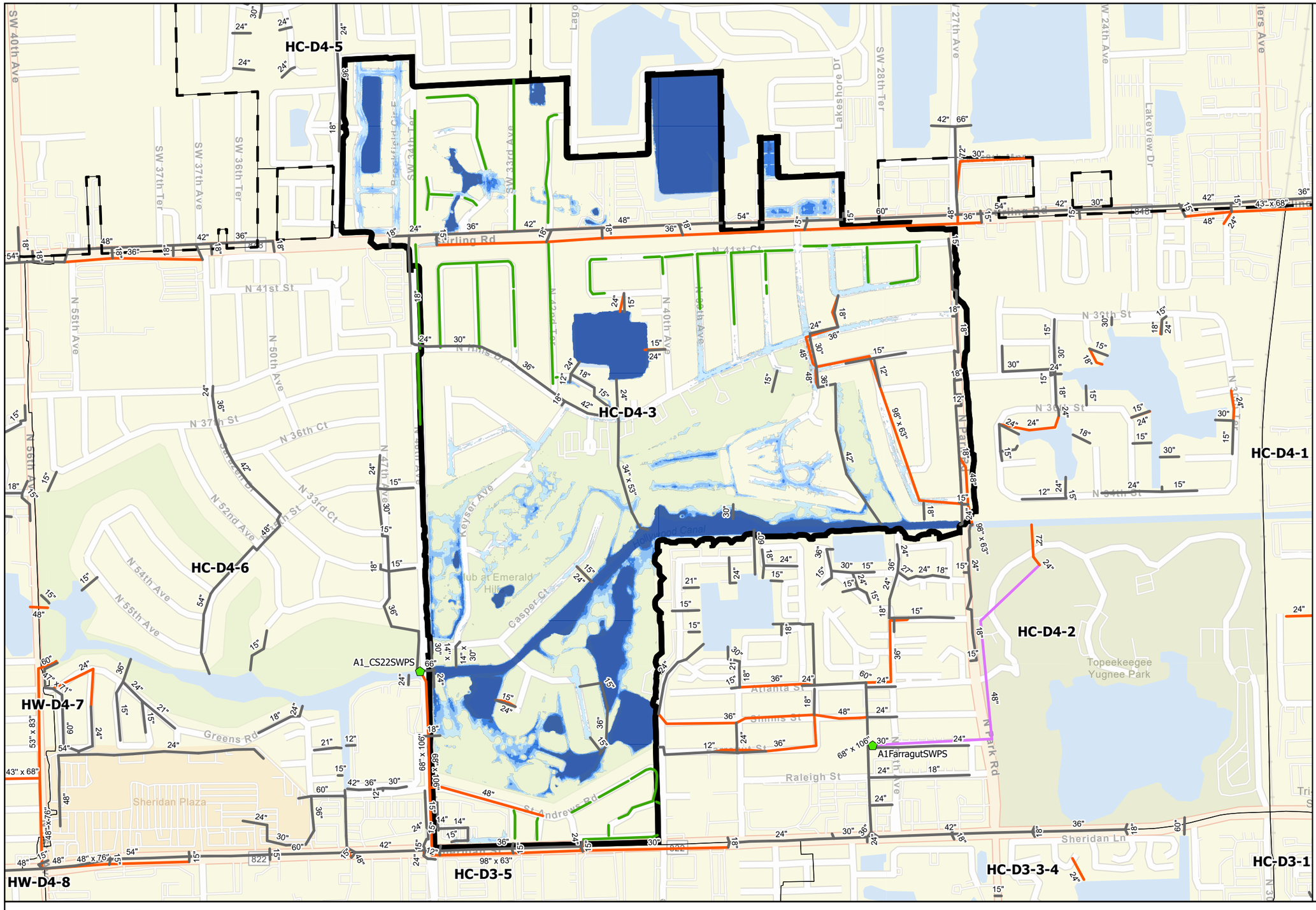
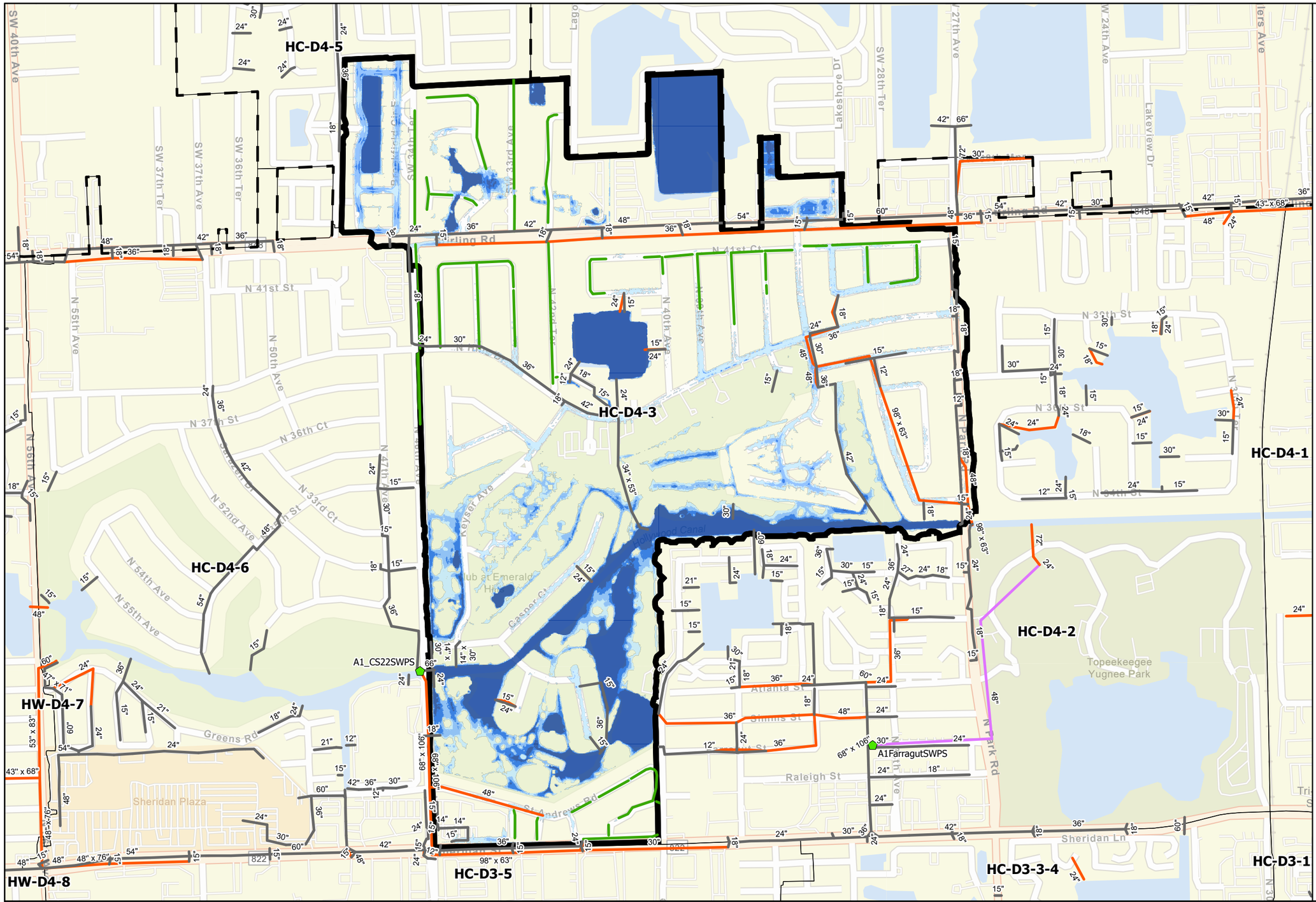


Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area
Emerald Hills / Stirling Commercial District

0 425 850 1,700 Feet
1:10,000

City of Hollywood Stormwater Master Plan
HC-D4-3_ALT1-5
2/28/2023



CDM Smith

CITY OF Hollywood FLORIDA

Predicted Flooding Reduction and Proposed ALT 1 CIP for 10-year Design Storm in CIP Area
Emerald Hills / Stirling Commercial District

0 425 850 1,700 Feet

1:10,000

City of Hollywood Stormwater Master Plan

HC-D4-3_ALT1-10

2/28/2023

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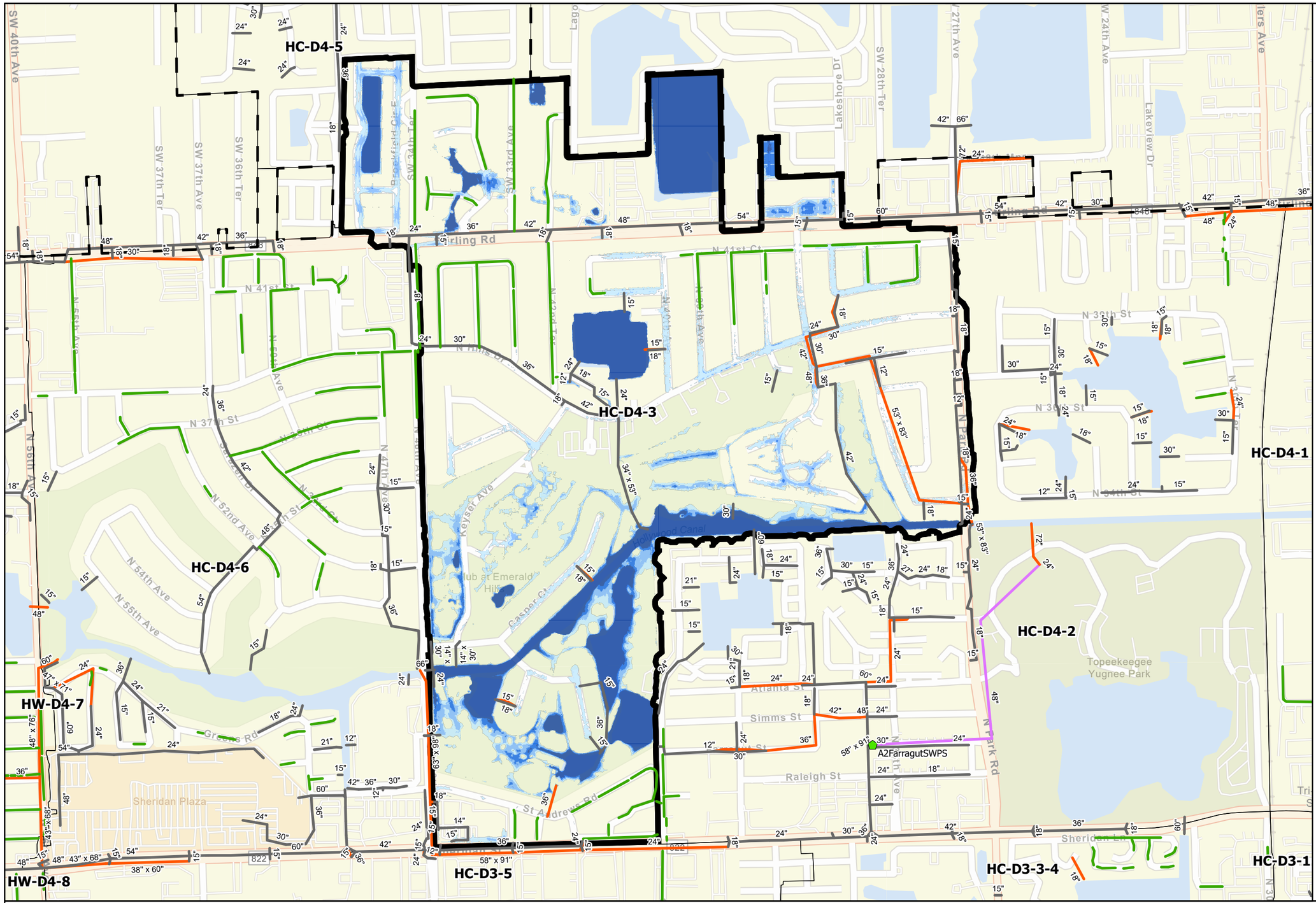

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area
Emerald Hills / Stirling Commercial District

0 425 850 1,700 Feet

1:10,000

City of Hollywood Stormwater Master Plan
HC-D4-3_ALT2-5
2/28/2023

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