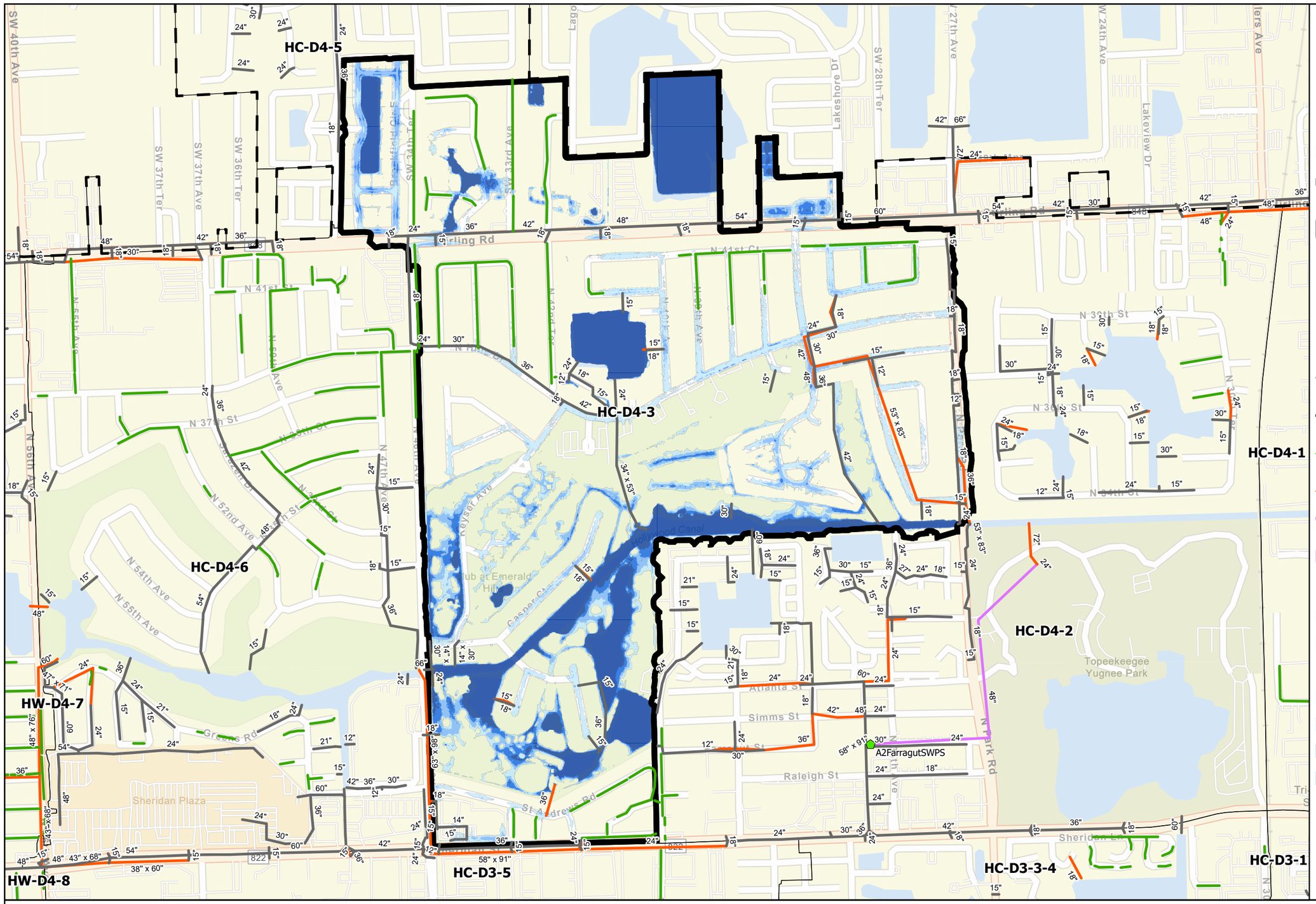

Legend

- 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.

N

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City of Hollywood Florida

Predicted Flooding Reduction and Proposed ALT 2 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_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	0	$ -
IN 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	695	$ 33,360
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	660	$ 34,320
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	5,380	$ 430,400
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	2,015	$ 251,875
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	2,465	$ 1,010,650
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	2	$ 70,000
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	1	$ 70,000
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	14,880	$ 3,720,000
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	217	$ 6,523,750
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		$ 12,144,355
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	26,097	$ 7,046,190
							CONSTRUCTION COST SUBTOTAL		$ 19,190,545
GENERAL CONDITIONS								Emerald Hills	
0061		Mobilization				LS	4%	$ 19,190,545	$ 767,622
0062		Insurance and General Conditions				LS	2%	$ 19,190,545	$ 383,811
0063		Permits/Fees				LS	2%	$ 19,190,545	$ 383,811
0064		Maintenance of Traffic				LS	3%	$ 19,190,545	$ 575,716
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 19,190,545	$ 2,878,582
0066		Construction Engineering Inspection Costs				LS	4%	$ 19,190,545	$ 767,622
0067		OCI Management Cost				LS	15%	$ 19,190,545	$ 2,878,582
0068		Project Contingency Costs				LS	30%	$ 19,190,545	$ 5,757,164
		Land acquisition							
NS SUBTOTAL									$ 14,392,909
TOTAL									$ 33,583,454

		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	510	$ 22,950
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	660	$ 31,680
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	575	$ 29,900
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	725	$ 58,000
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	280	$ 32,200
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	180	$ 22,500
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	2,465	$ 1,064,880
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	2	$ 70,000
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	1	$ 70,000
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	13,133	$ 3,283,250
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	154	$ 1,158,000
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!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL								$ 5,843,360
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	18,530	$ 5,003,100
							CONSTRUCTION COST SUBTOTAL		**$ 10,846,460**
GENERAL CONDITIONS								Emerald Hills	
0061		Mobilization				LS	**4%**	$ 10,846,460	$ 433,858
0062		Insurance and General Conditions				LS	**2%**	$ 10,846,460	$ 216,929
0063		Permits/Fees				LS	**2%**	$ 10,846,460	$ 216,929
0064		Maintenance of Traffic				LS	**3%**	$ 10,846,460	$ 325,394
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 10,846,460	$ 1,626,969
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 10,846,460	$ 433,858
0067		OCI Management Cost				LS	**15%**	$ 10,846,460	$ 1,626,969
0068		Project Contingency Costs				LS	**30%**	$ 10,846,460	$ 3,253,938
NS SUBTOTAL									$ 8,134,845
TOTAL									**$ 18,981,305**

- **Figure HC-D4-3-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D4-3-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D4-3-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D4-3-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D4-3-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D4-3_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D4-3_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.5 CIP Area HC-D4-2 (Emerald Hills / TY Park)

Root Causes of Flooding

This CIP area is characterized by mostly built-out, mixed commercial and residential land use, and park. South of the canal is the lowest area. A large system exists which is not sufficient to flow by gravity into the canal.

Alternative 1

Proposed CIP:

- New Farragut SWPS Type I total capacity of 140 cfs pumping into a new proposed dry detention area located in the landscape area in TY Park with via twin 2,650 l.f. 48-inch FMs located in City R/O/W at the west end of Farragut St in the grass near the Sheridan Hills Baptist Church park.
- Acquire a new 4.5 Acre TY Park Dry detention area merged into the landscape area of the park with a 24-inch pipe discharge, low-flow orifice bleeder and BFP (or an inlet structure box) at a bottom elevation area of EL 3 NAVD, bermed perimeter at EL 8 NAVD, and a 20-ft wide spillway at 7 NAVD and a 72-inch pipe into the C-10 spur canal.
- New gravity collection systems and inlets in CIP neighborhoods to new SWPS.
- New 3,730 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-30 post-5

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- New Farragut SWPS Type I total capacity of 120 cfs pumping into a new proposed dry detention area located in the landscape area in TY Park with via twin 2,650 l.f. 42-inch FMs located in City R/O/W at the west end of Farragut St in the grass near the Sheridan Hills Baptist Church park.
- Acquire a new 4.5 Acre TY Park Dry detention area merged into the landscape area of the park with a 24-inch pipe discharge, low-flow orifice bleeder and BFP (or an inlet structure box) at a bottom elevation area of EL 3 NAVD, bermed perimeter at EL 8 NAVD, and a 20-ft wide spillway at 7 NAVD and a 72-inch pipe into the C-10 spur canal.
- New gravity collection systems and inlets in CIP area neighborhoods to the new SWPS.
- New 1,885 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-30 post-8

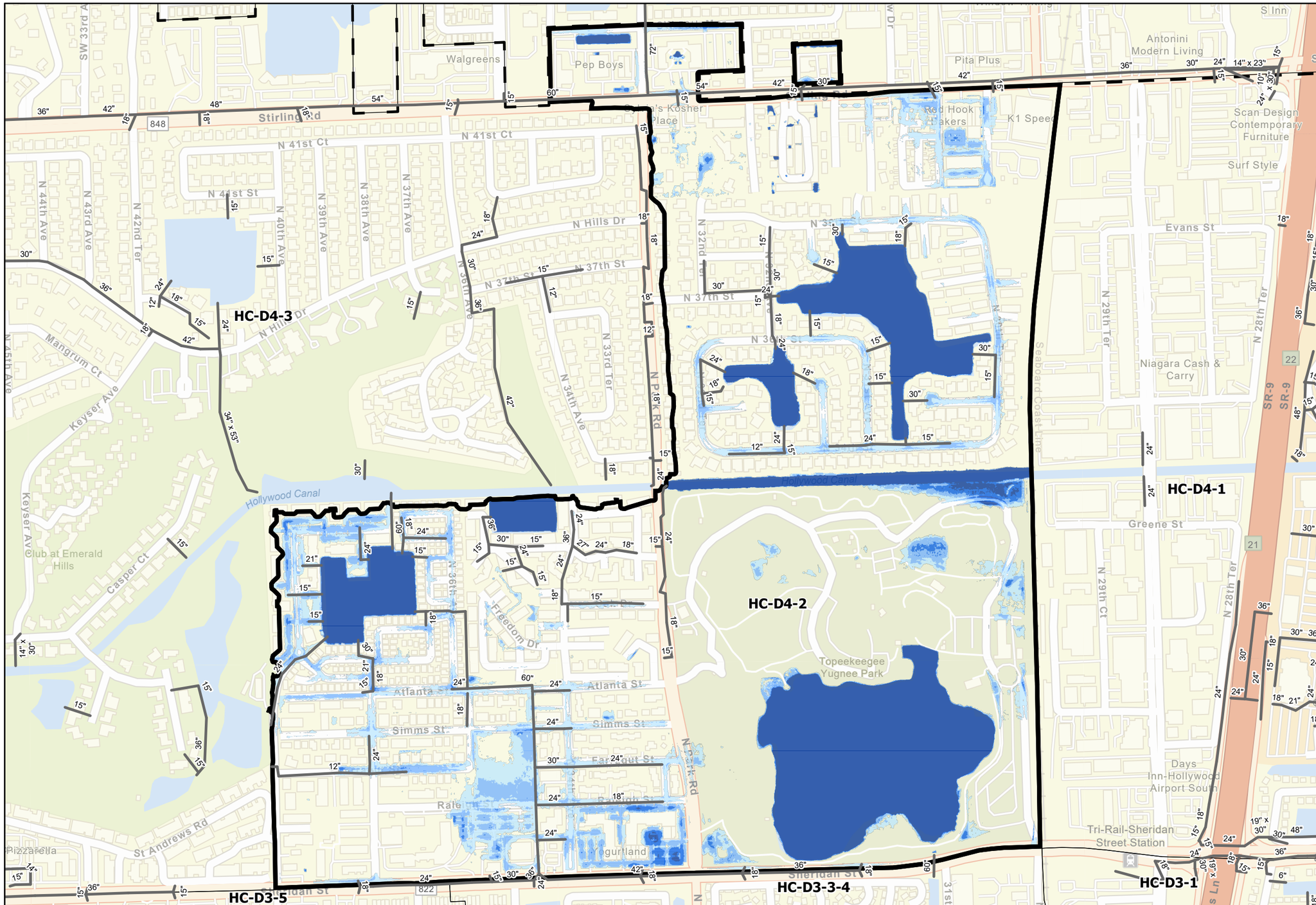
Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D4-2 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-D4-2-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D4-2-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D4-2-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D4-2-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D4-2-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D4-2-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D4-2_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D4-2_ALT2 – Planning Budget for Alternative 2 Proposed CIP**



Current Conditions Flooding in CIP Area
Emerald Hills / TY Park
5-year Design Storm

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

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

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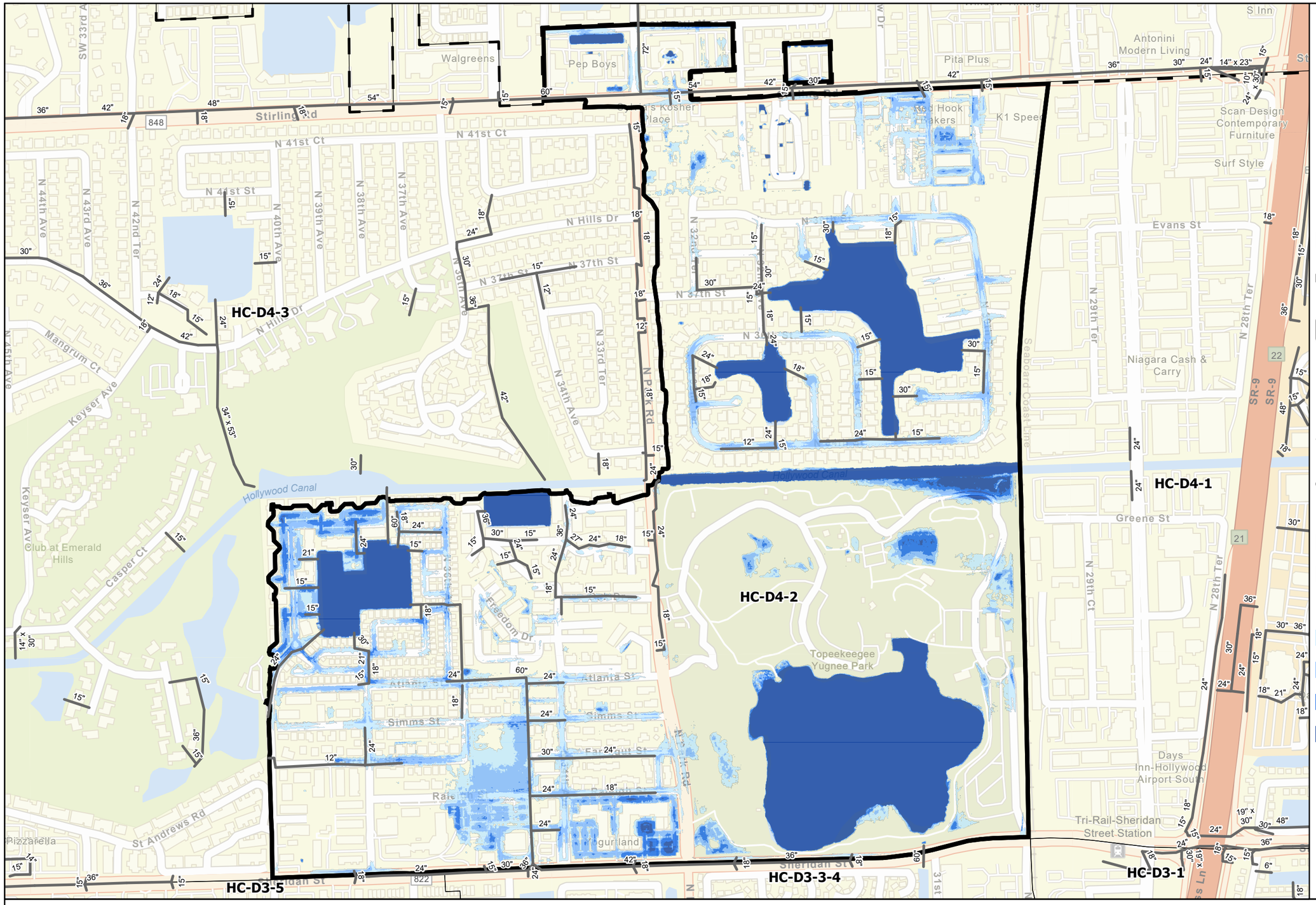

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City of Hollywood Florida

Current Conditions Flooding in CIP Area
Emerald Hills / TY Park
10-year Design Storm

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-2_EC-10

2/28/2023

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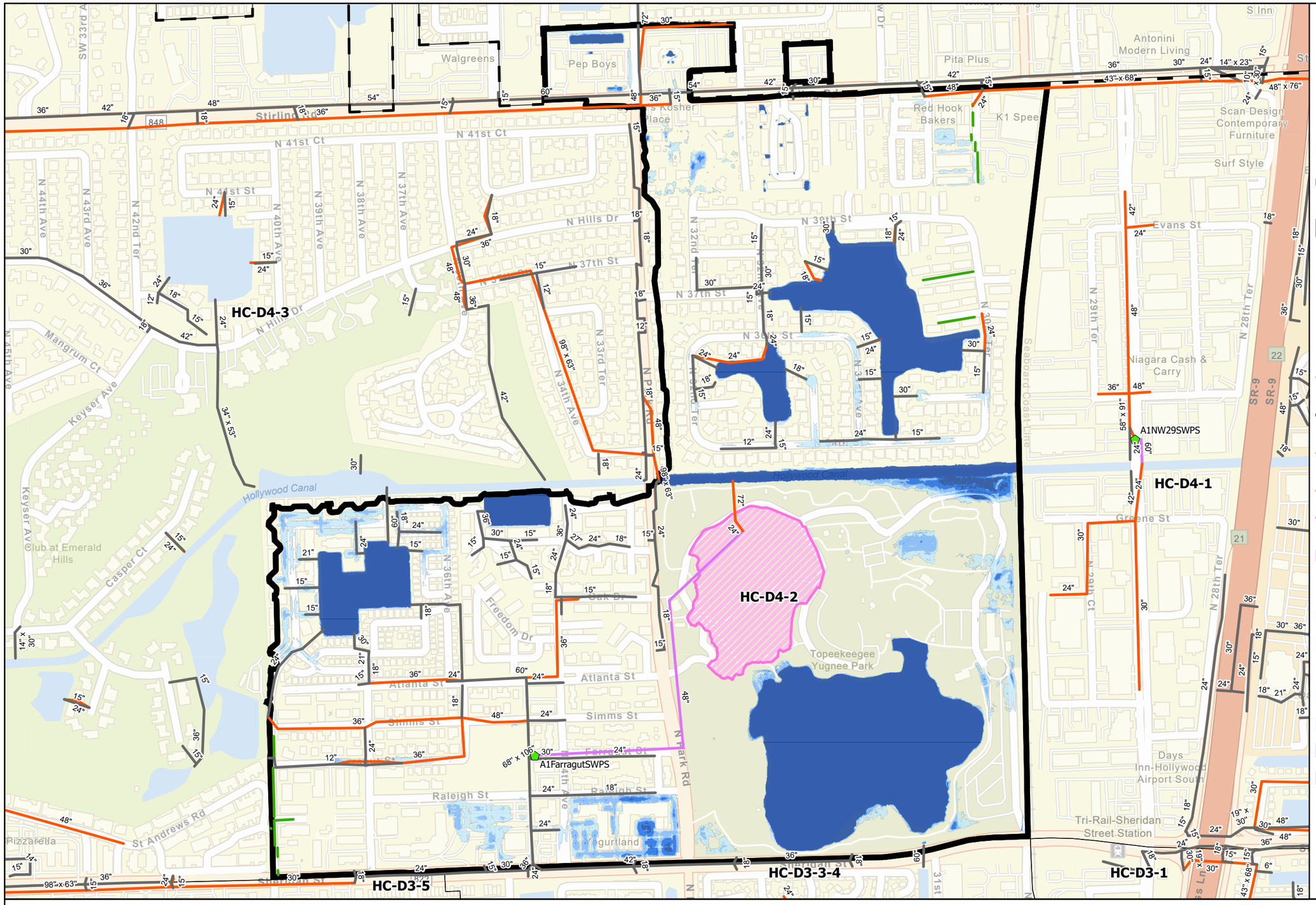

CDM Smith

City of Hollywood Florida

Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area Emerald Hills / TY Park

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-2_ALT1-5

2/28/2023

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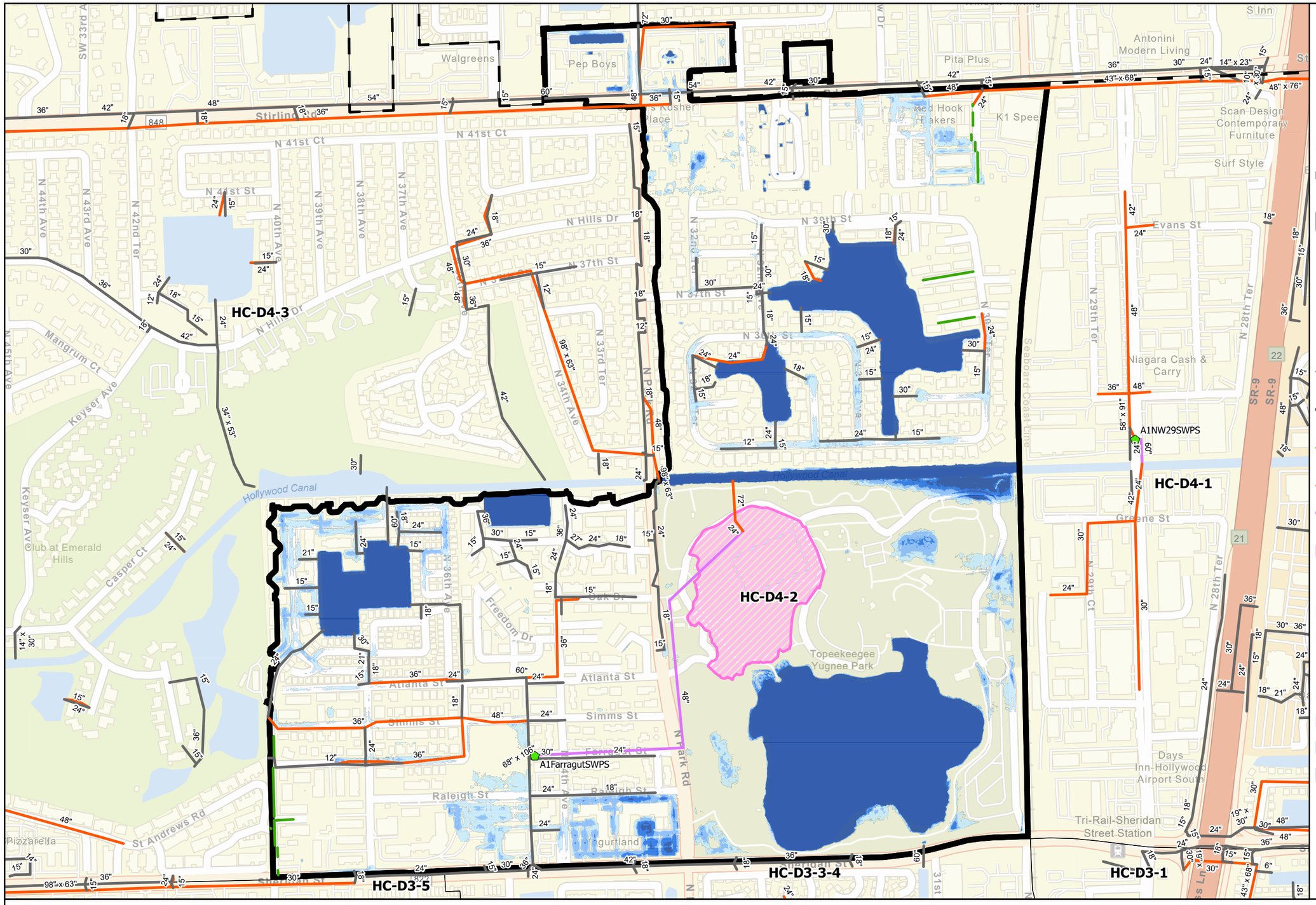

CDM Smith

City of Hollywood Florida

Predicted Flooding Reduction and Proposed ALT 1 CIP for 10-year Design Storm in CIP Area Emerald Hills / TY Park

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-2_ALT1-10

2/28/2023

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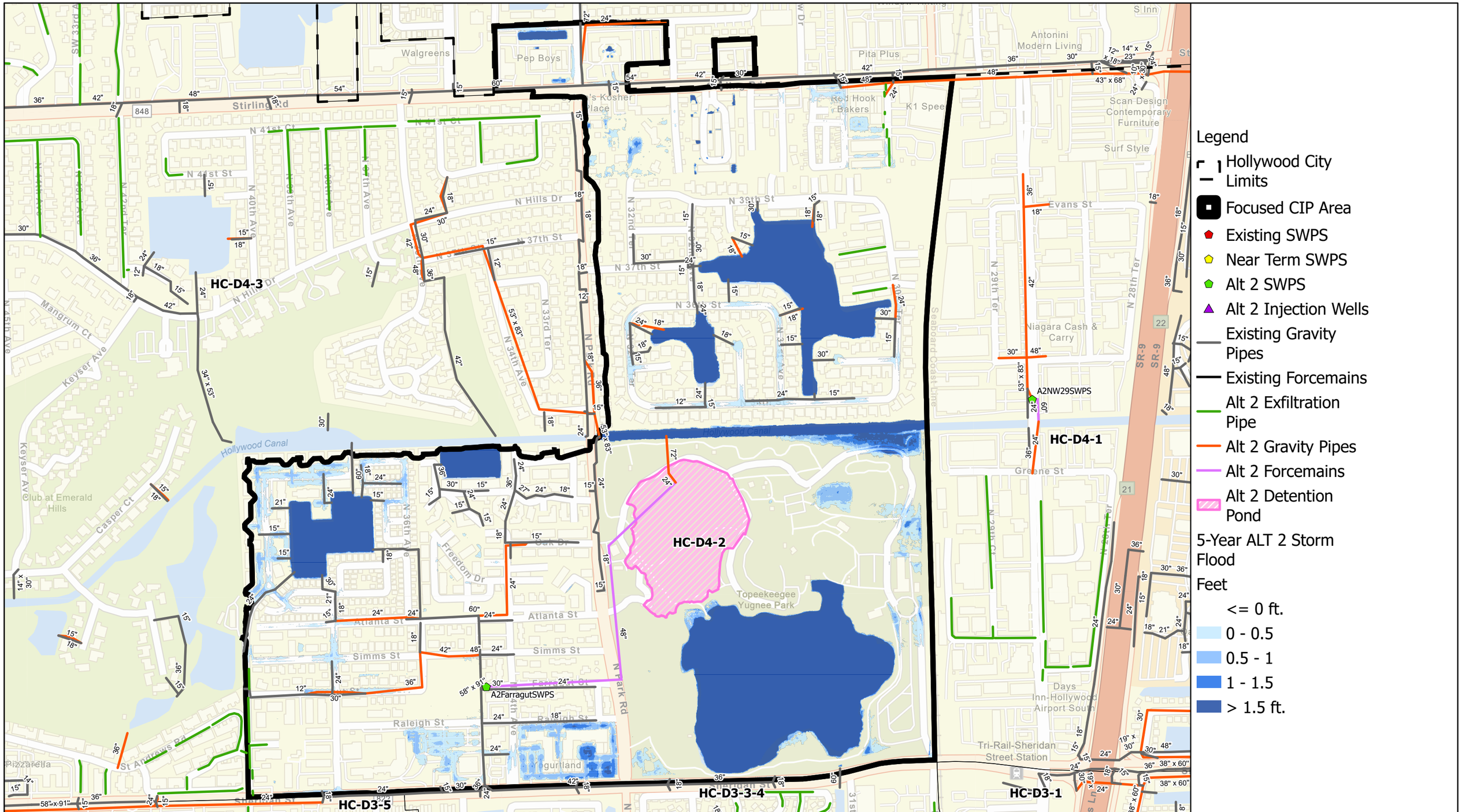

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area Emerald Hills / TY Park

City of Hollywood Stormwater Master Plan

HC-D4-2_ALT2-5

2/28/2023

0 337.5 675 1,350 Feet

1:8,000

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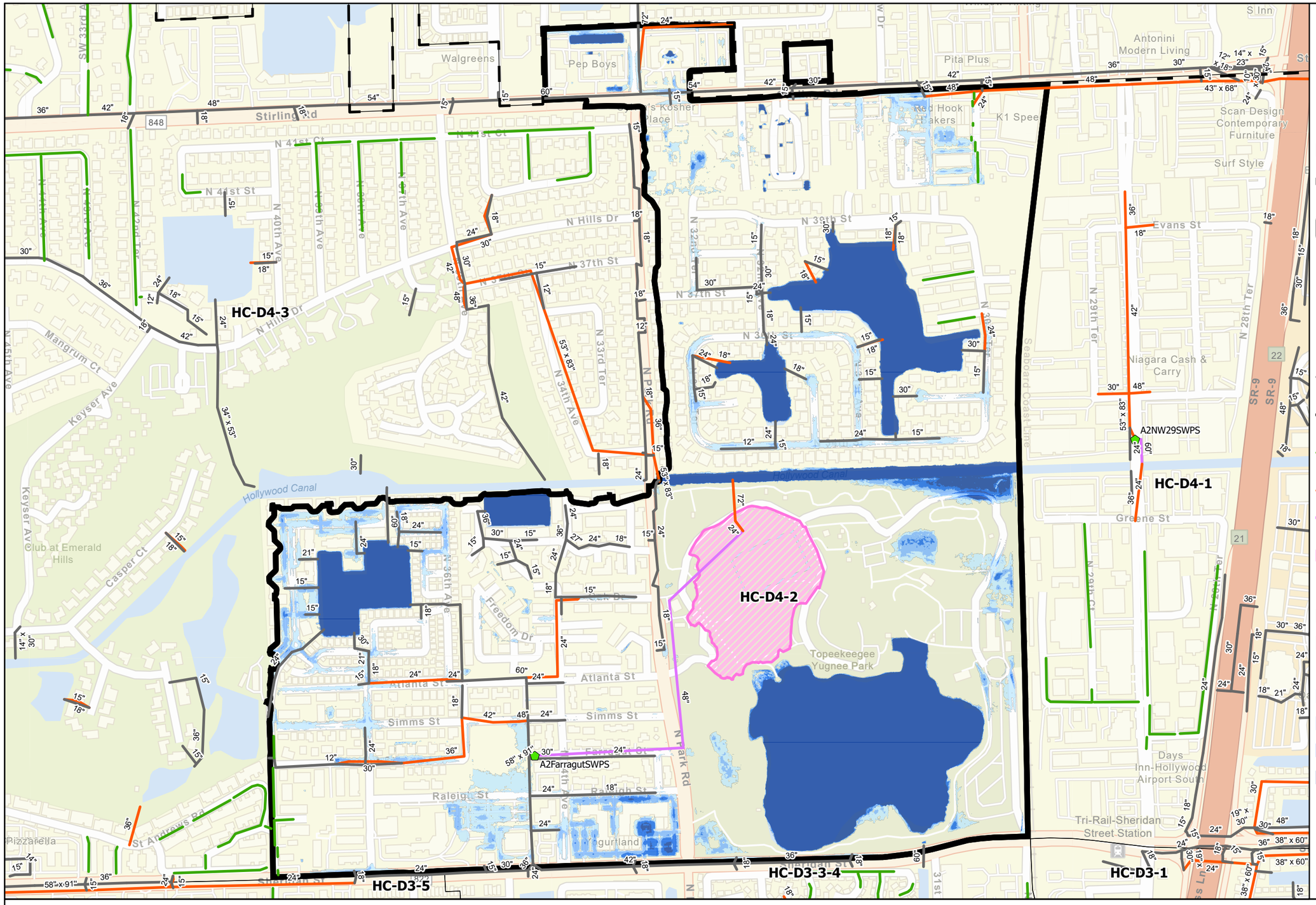


CDM Smith

City of Hollywood Florida

Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area Emerald Hills / TY Park

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-2_ALT2-10

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

		CONCEPTUAL CAPITAL COST ESTIMATE						Emerald Hills and TY Park	
								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	5,300	$ 3,243,600
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	1	$ 2,400,000
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									$ 5,643,600
EXFILTRATION WITH GRAVITY MAINS								Emerald Hills and TY Park	
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	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	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	4,455	$ 356,400
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	465	$ 58,125
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	300	$ 145,500
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	200	$ 92,000
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	1	$ 35,000
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	3,730	$ 932,500
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	95	$ 2,858,000
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	5	$ 1,598
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL						#N/A		$ 4,533,055
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	15,461	$ 4,174,470
							CONSTRUCTION COST SUBTOTAL		$ 14,351,125
GENERAL CONDITIONS								Emerald Hills and TY Park	
0061		Mobilization				LS	4%	$ 14,351,125	$ 574,045
0062		Insurance and General Conditions				LS	2%	$ 14,351,125	$ 287,023
0063		Permits/Fees				LS	2%	$ 14,351,125	$ 287,023
0064		Maintenance of Traffic				LS	3%	$ 14,351,125	$ 430,534
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 14,351,125	$ 2,152,669
0066		Construction Engineering Inspection Costs				LS	4%	$ 14,351,125	$ 574,045
0067		OCI Management Cost				LS	15%	$ 14,351,125	$ 2,152,669
0068		Project Contingency Costs				LS	30%	$ 14,351,125	$ 4,305,338
		Land acquisition							
NS SUBTOTAL									$ 10,763,344
TOTAL									$ 25,114,469

		CONCEPTUAL CAPITAL COST ESTIMATE						Emerald Hills and TY Park	
								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	5,300	$ 1,780,800
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	1	$ 2,400,000
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									$ 4,180,800
EXFILTRATION WITH GRAVITY MAINS								Emerald Hills and TY Park	
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	645	$ 29,025
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	1,965	$ 94,320
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	450	$ 23,400
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	705	$ 56,400
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	400	$ 46,000
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	65	$ 8,125
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	300	$ 145,500
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	200	$ 64,000
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	1	$ 35,000
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	1,885	$ 471,250
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	66	$ 492,938
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	5	$ 1,598
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL								$ 1,495,958
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	11,916	$ 3,217,320
							CONSTRUCTION COST SUBTOTAL		**$ 8,894,078**
GENERAL CONDITIONS								Emerald Hills and TY Park	
0061		Mobilization				LS	**4%**	$ 8,894,078	$ 355,763
0062		Insurance and General Conditions				LS	**2%**	$ 8,894,078	$ 177,882
0063		Permits/Fees				LS	**2%**	$ 8,894,078	$ 177,882
0064		Maintenance of Traffic				LS	**3%**	$ 8,894,078	$ 266,822
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 8,894,078	$ 1,334,112
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 8,894,078	$ 355,763
0067		OCI Management Cost				LS	**15%**	$ 8,894,078	$ 1,334,112
0068		Project Contingency Costs				LS	**30%**	$ 8,894,078	$ 2,668,223
NS SUBTOTAL									$ 6,670,558
TOTAL									**$ 15,564,636**

3.2.2.6 CIP Area HC-D4-1 (Oakwood Hills)

Root Causes of Flooding

This CIP area is characterized by mostly built-out, mixed commercial and industrial land use. Topography is low and there is a high impervious without a lot of area for exfiltration. The area drains to the C-10 spur.

Alternative 1

Proposed CIP:

- Three new SWPSs for the CIP area:
    1. New StirlingE SWPS Type I at total 100 cfs total pumping into a new proposed 80 cfs pumped recharge wellfield (20 IWs at assumed 4 cfs each) and into a new 36-inch FM outfall with BFP into the C-10 canal, located at a parcel off of Stirling Rd (or in an adjacent vacant parcel of City of Dania Beach).
    2. New N29 SWPS Type II at total 220 cfs total pumping into a new 60-inch FM outfall with BFP into the C-10 canal, located in the grassy area adjacent to the canal east of I-95 at N 29th Ave north of the canal south of Pershing Street.
    3. New BruceTer SWPS Type I at 50 cfs total pumping directly into a new outfall into the C-10 canal, located at the vacant parcel North of Sheridan St at N 28th Ave or the access road in the FDOT R/O/W to serve the finger island.
- New gravity collection systems and inlets in the neighborhood.
- New 5,254 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-7, post seawall-15, post-0

Summary of Offsite Issues Affecting CIP Area:

1. Future seawall construction coordination with Dania Beach for contiguous shoreline armoring north of Stirling Rd at EL 5 ft NAVD.

Alternative 2

Proposed CIP:

- Two new SWPSs:

1. New StirlingE SWPS Type I at total 80 cfs pumping into a new proposed 80 cfs pumped recharge wellfield (20 IWs at assumed 4 cfs each) and into a short run of 36-inch FM outfall with BFP into the C-10 canal, located at a parcel off of Stirling Rd (or in an adjacent vacant parcel of City of Dania Beach).
2. New N29 SWPS Type II at total 180 cfs total pumping into a new 60-inch FM outfall with BFP into the C-10 canal, located in the grassy area adjacent to the canal east of I-95 at N 29th Ave north of the canal south of Pershing Street.

- New gravity collection systems and inlets in CIP area neighborhoods to new SWPSs and into the C-10 directly with BFP.
- New 4,565 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-7, post seawall-15, post-3

Summary of Offsite Issues Affecting CIP Area:

1. Future seawall coordination with Dania Beach for contiguous armoring north of Stirling Rd.

HC-D4-1 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-D4-1-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D4-1-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D4-1-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D4-1-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D4-1-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D4-1-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D4-1_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D4-1_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.7 CIP Area HC-D3-5 (Hollywood Hills North)

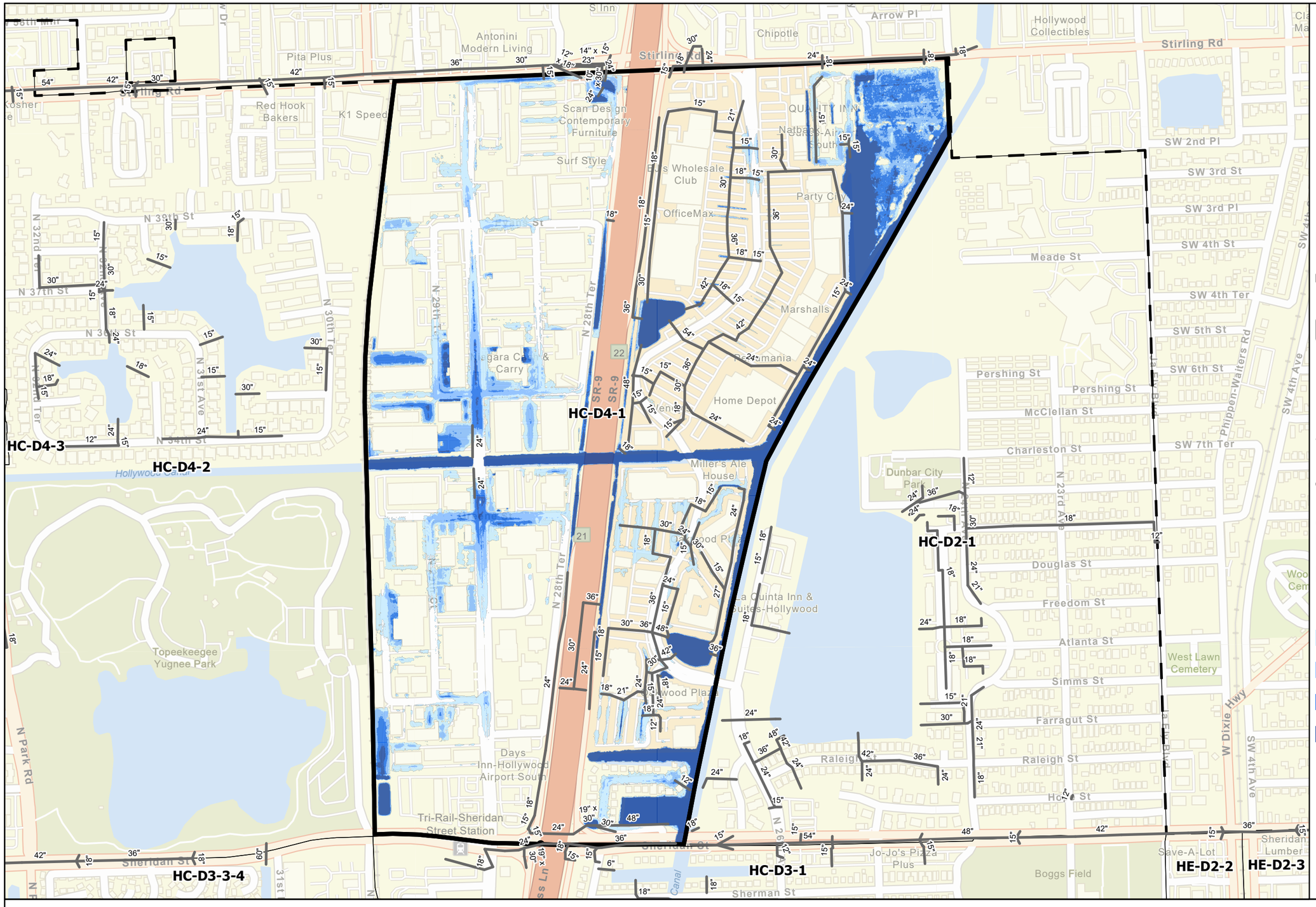
Root Causes of Flooding

This CIP area is characterized by mostly built-out, residential land use, there is no positive drainage system existing and only sporadic exfiltration trenches. The low spot is along Sheridan St. Sheet flow runoff comes into the area from the surrounding neighborhoods.

Alternative 1

Proposed CIP:

- New gravity collection systems with a new parallel primary system along Sheridan St and inlets in neighborhoods outfalling into C-10 spur canal just upstream of the new CS-22 structure and SWPS.



Current Conditions Flooding in CIP Area
Oakwood Hills
5-year Design Storm

City of Hollywood Stormwater Master Plan
HC-D4-1_EC-5
2/28/2023

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

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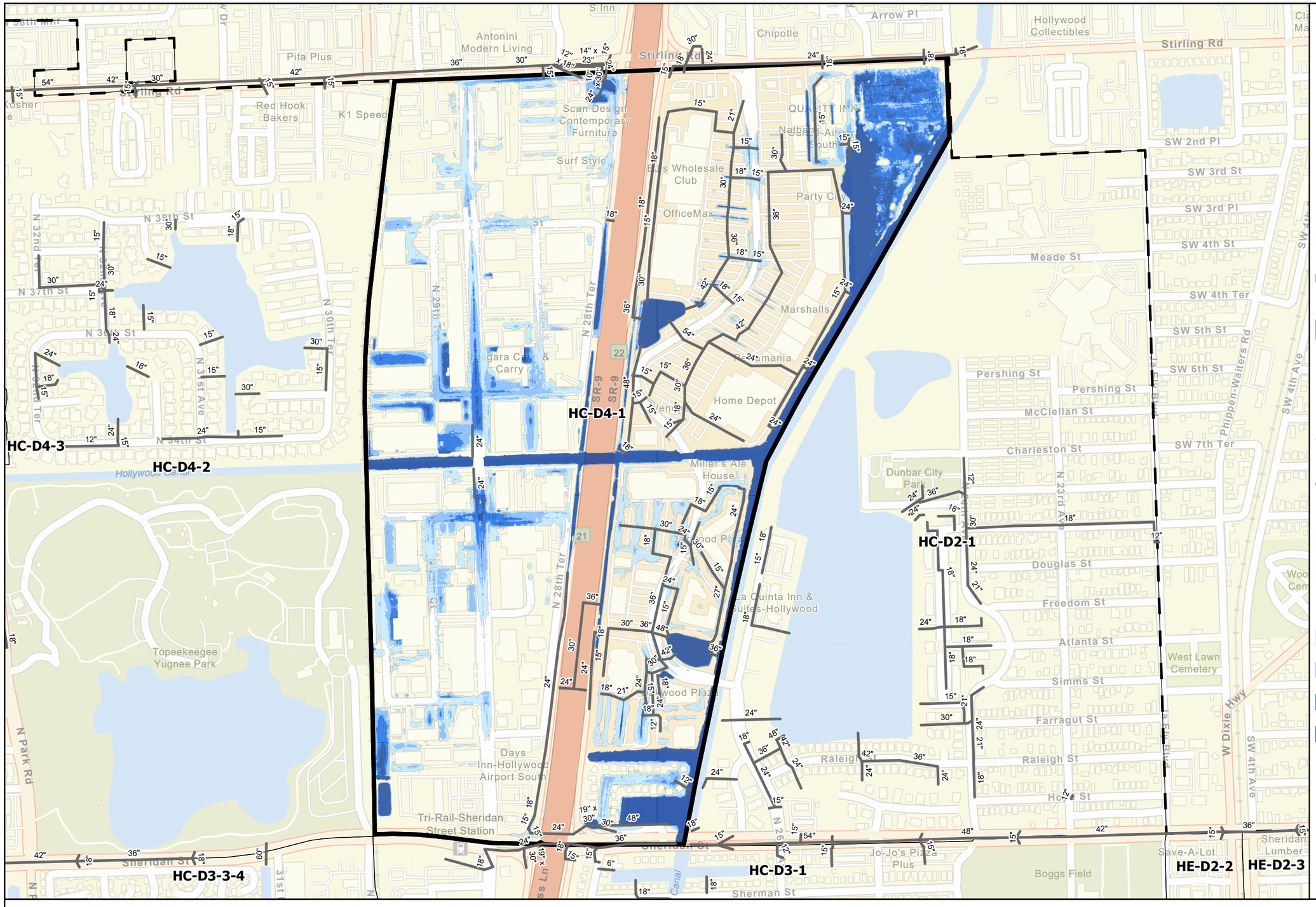

Current Conditions Flooding in CIP Area
Oakwood Hills
10-year Design Storm

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

City of Hollywood Stormwater Master Plan
HC-D4-1_EC-10
2/28/2023

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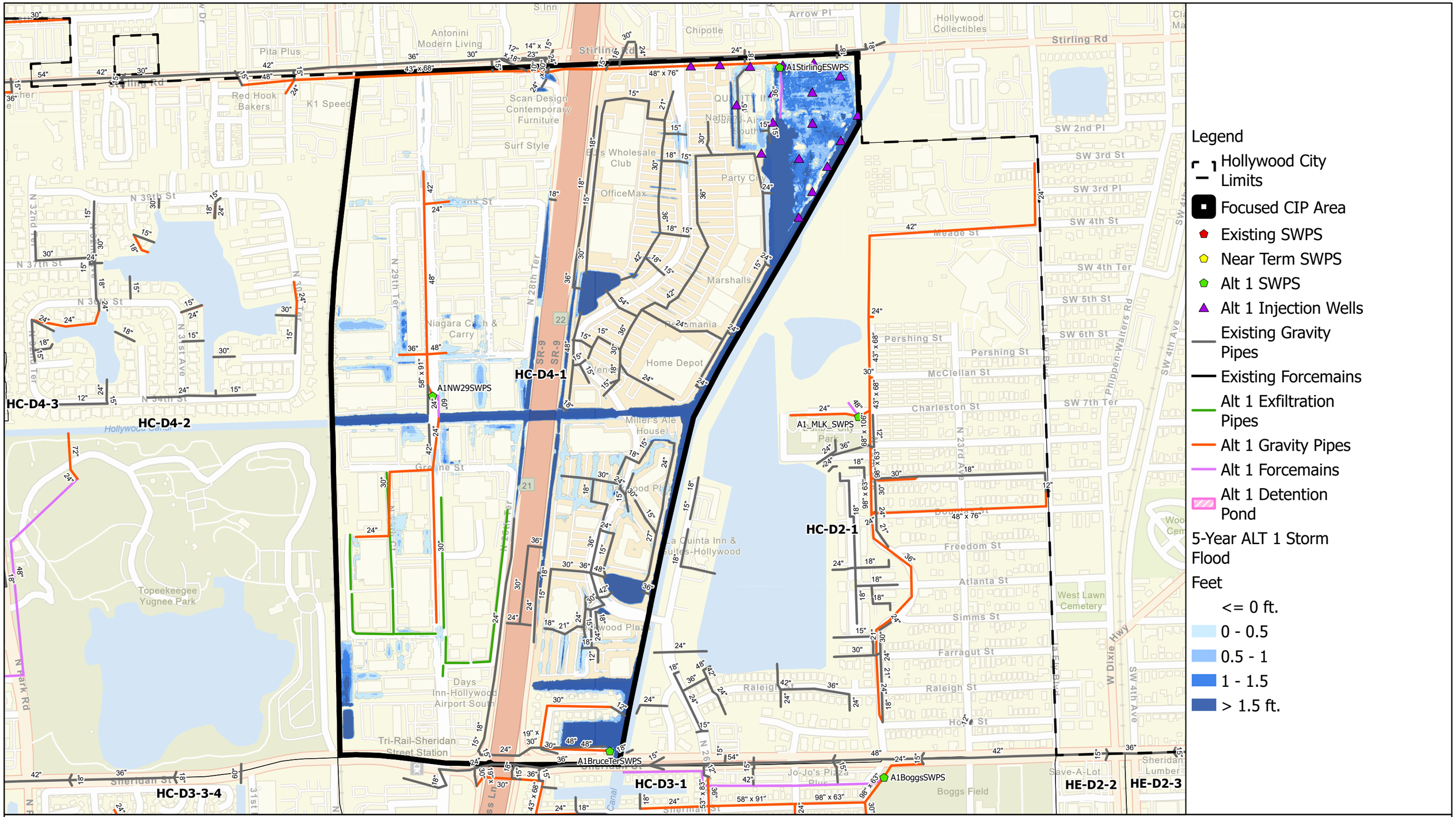

CDM Smith

City of Hollywood Florida

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-1_ALT1-5

2/28/2023

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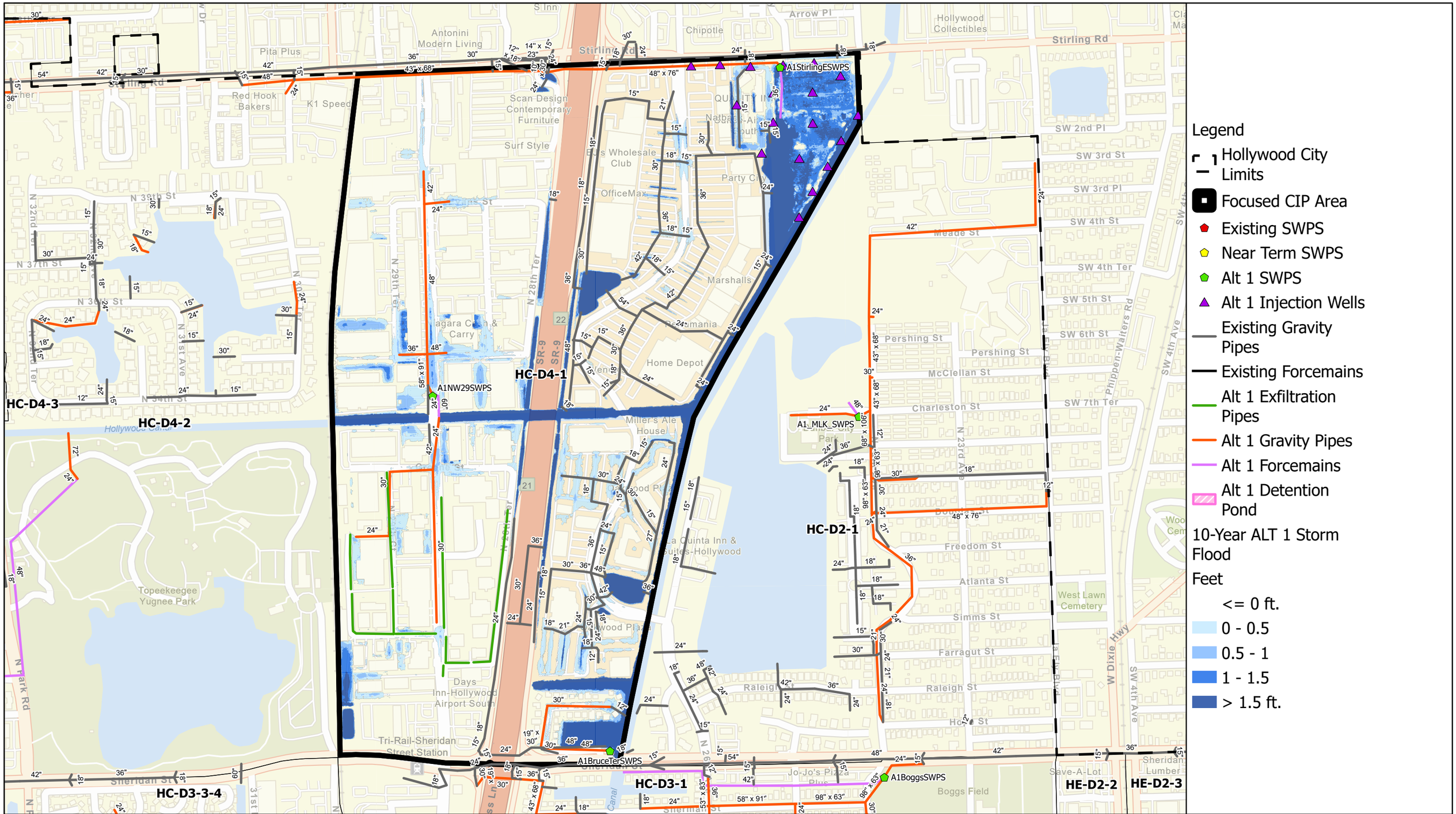

CDM Smith

City of Hollywood Florida

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-1_ALT1-10

2/28/2023

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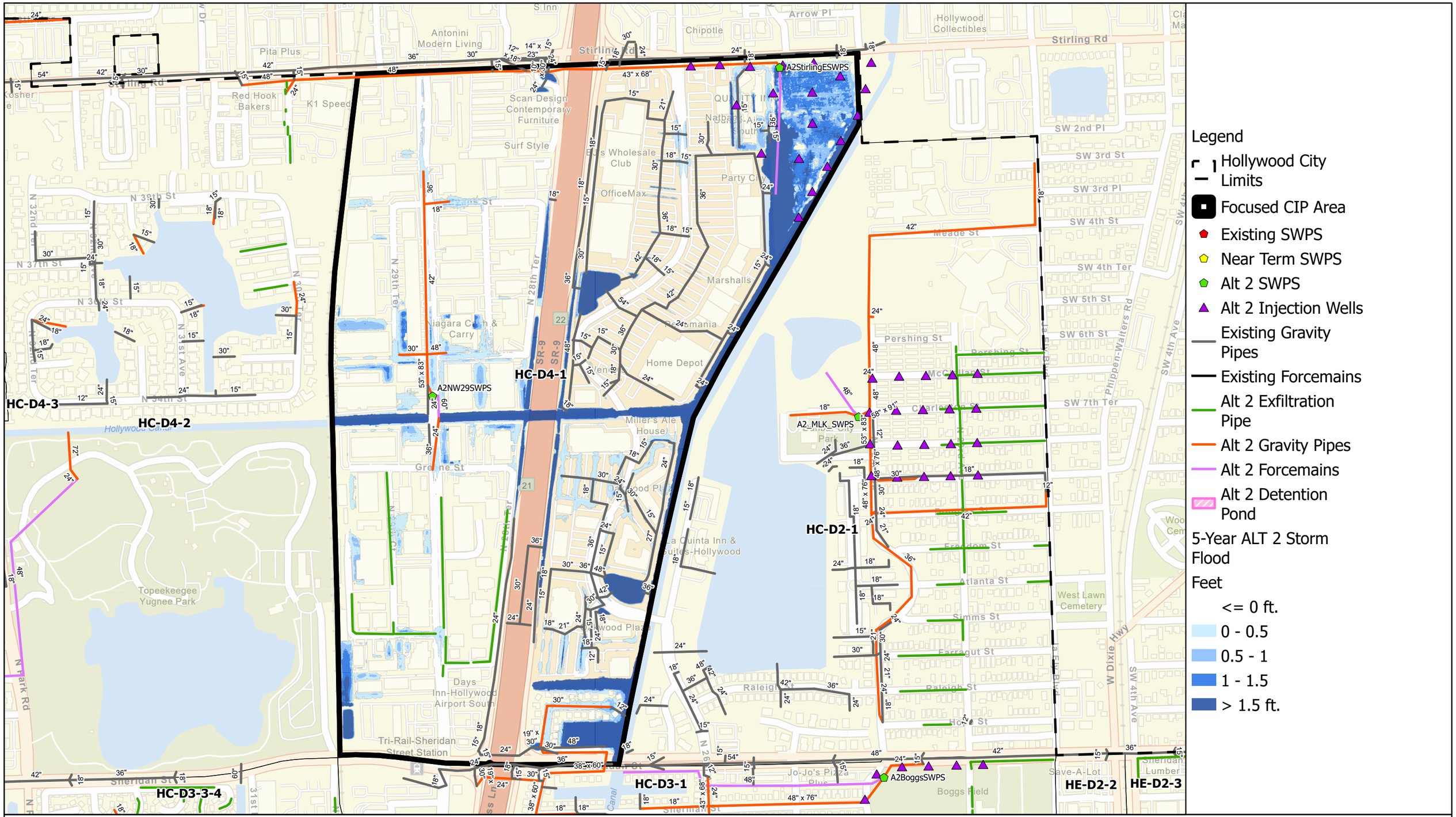

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area Oakwood Hills

City of Hollywood Stormwater Master Plan

HC-D4-1_ALT2-5

2/28/2023

0 337.5 675 1,350 Feet

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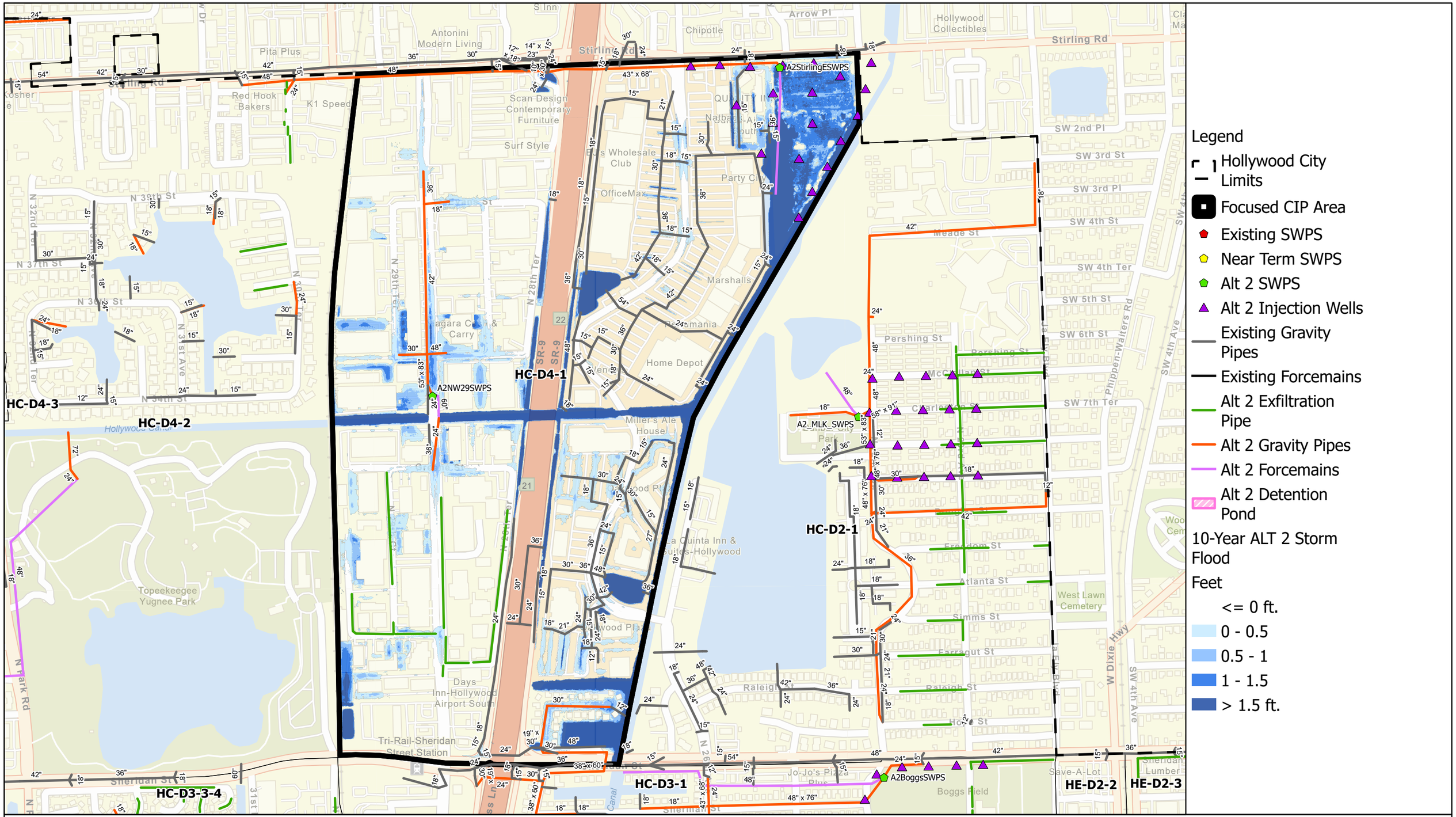

CDM Smith

City of Hollywood Florida

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D4-1_ALT2-10

2/28/2023

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		CONCEPTUAL CAPITAL COST ESTIMATE						Oakwood 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	500	$ 121,000
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	500	$ 574,500
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	4,500	$ 1,588,500
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	20	$ 1,500,000
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	2	$ 4,800,000
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	1	$ 3,500,000
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									$ 12,084,000
EXFILTRATION WITH GRAVITY MAINS								Oakwood 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	605	$ 29,040
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	2,815	$ 146,380
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	250	$ 20,000
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	650	$ 74,750
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	2,250	$ 281,250
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	1,945	$ 719,650
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	1,850	$ 740,000
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	450	$ 144,000
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	5,254	$ 1,313,500
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	145	$ 4,347,250
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	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL						#N/A		$ 7,815,820
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	21,569	$ 5,823,630
							CONSTRUCTION COST SUBTOTAL		$ 25,723,450
GENERAL CONDITIONS								Oakwood Hills	
0061		Mobilization				LS	4%	$ 25,723,450	$ 1,028,938
0062		Insurance and General Conditions				LS	2%	$ 25,723,450	$ 514,469
0063		Permits/Fees				LS	2%	$ 25,723,450	$ 514,469
0064		Maintenance of Traffic				LS	3%	$ 25,723,450	$ 771,704
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 25,723,450	$ 3,858,518
0066		Construction Engineering Inspection Costs				LS	4%	$ 25,723,450	$ 1,028,938
0067		OCI Management Cost				LS	15%	$ 25,723,450	$ 3,858,518
0068		Project Contingency Costs				LS	30%	$ 25,723,450	$ 7,717,035
		Land acquisition							
NS SUBTOTAL									$ 19,292,588
TOTAL									$ 45,016,038

		CONCEPTUAL CAPITAL COST ESTIMATE						Oakwood 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	500	$ 121,000
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	500	$ 574,500
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	4,500	$ 1,588,500
0010	11			IWI-Injection Wells-Inline		EA	$ 65,000.00	0	$ -
0011	12			IWO-Injection Wells -Offline		EA	$ 75,000.00	20	$ 1,500,000
0012	6	PS-Storm Drainage Pump Stations < 166 cfs			I	EA	$ 2,400,000.00	1	$ 2,400,000
0013	7	PS-Storm Drainage Pump Stations < 166-246 cfs			II	EA	$ 3,500,000.00	1	$ 3,500,000
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									$ 9,684,000
EXFILTRATION WITH GRAVITY MAINS								Oakwood 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	200	$ 9,000
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	150	$ 7,200
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	1,075	$ 55,900
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	650	$ 52,000
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	1,150	$ 132,250
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	2,065	$ 258,125
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	1,200	$ 282,000
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	2,280	$ 843,600
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	450	$ 194,400
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	4,564	$ 1,141,000
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	126	$ 944,000
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!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL								$ 3,919,475
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	19,284	$ 5,206,680
							CONSTRUCTION COST SUBTOTAL		**$ 18,810,155**
GENERAL CONDITIONS								Oakwood Hills	
0061		Mobilization				LS	**4%**	$ 18,810,155	$ 752,406
0062		Insurance and General Conditions				LS	**2%**	$ 18,810,155	$ 376,203
0063		Permits/Fees				LS	**2%**	$ 18,810,155	$ 376,203
0064		Maintenance of Traffic				LS	**3%**	$ 18,810,155	$ 564,305
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 18,810,155	$ 2,821,523
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 18,810,155	$ 752,406
0067		OCI Management Cost				LS	**15%**	$ 18,810,155	$ 2,821,523
0068		Project Contingency Costs				LS	**30%**	$ 18,810,155	$ 5,643,047
NS SUBTOTAL									$ 14,107,616
TOTAL									**$ 32,917,771**

- New 63,110 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-3 post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- New gravity collection systems with a new parallel primary system along Sheridan St and inlets in neighborhoods outfalling into C-10 spur canal just upstream of the CS-22 structure modified for BFP.
- New 14,170 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-3 post-1

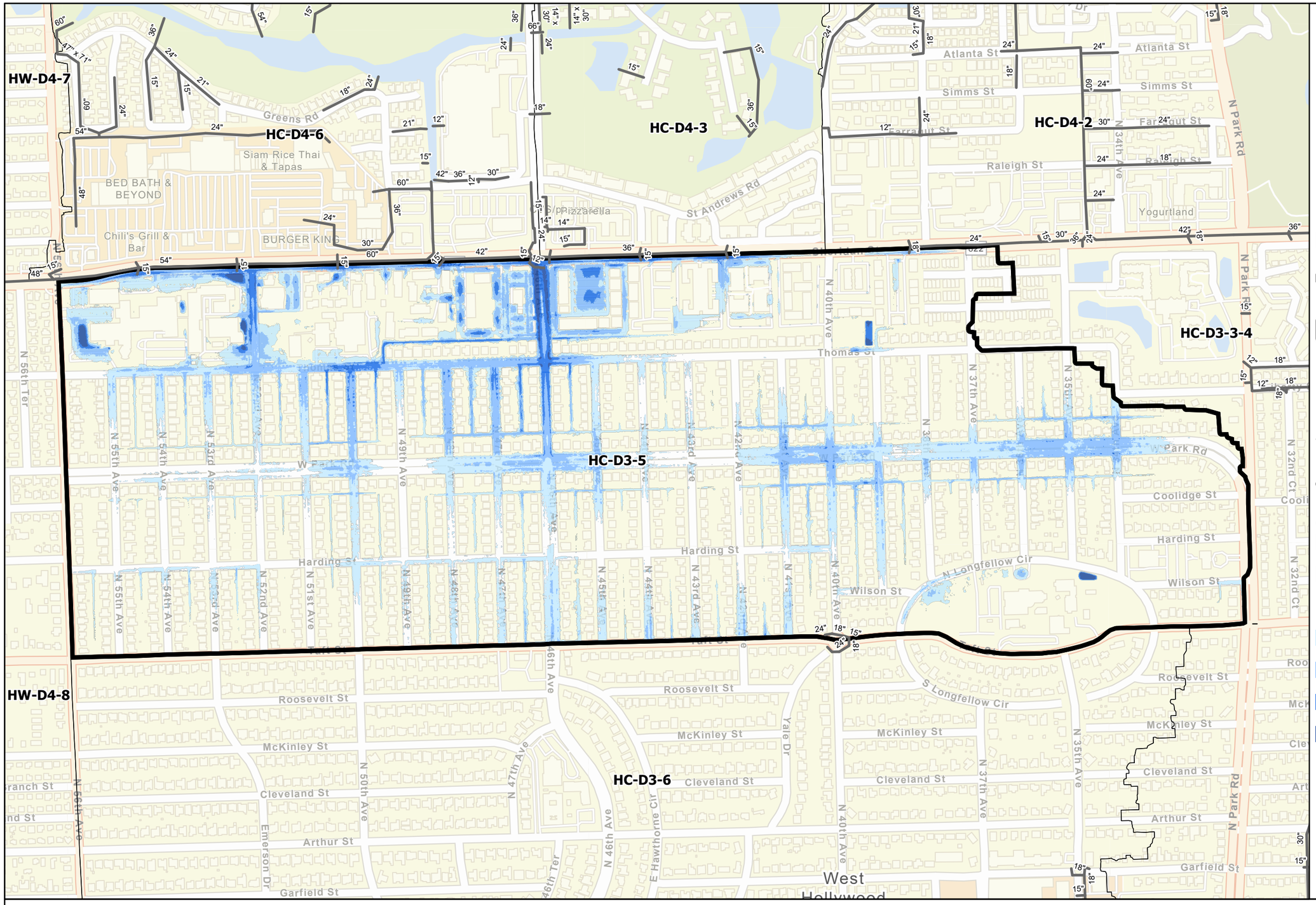
Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D3-5 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-D3-5-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D3-5-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D3-5-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D3-5-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D3-5-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D3-5-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D3-5_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D3-5_ALT2 – Planning Budget for Alternative 2 Proposed CIP**



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.

N

CDM Smith

City of Hollywood Florida

Current Conditions Flooding in CIP Area
Hollywood Hills North
5-year Design Storm

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-5_EC-5

2/28/2023

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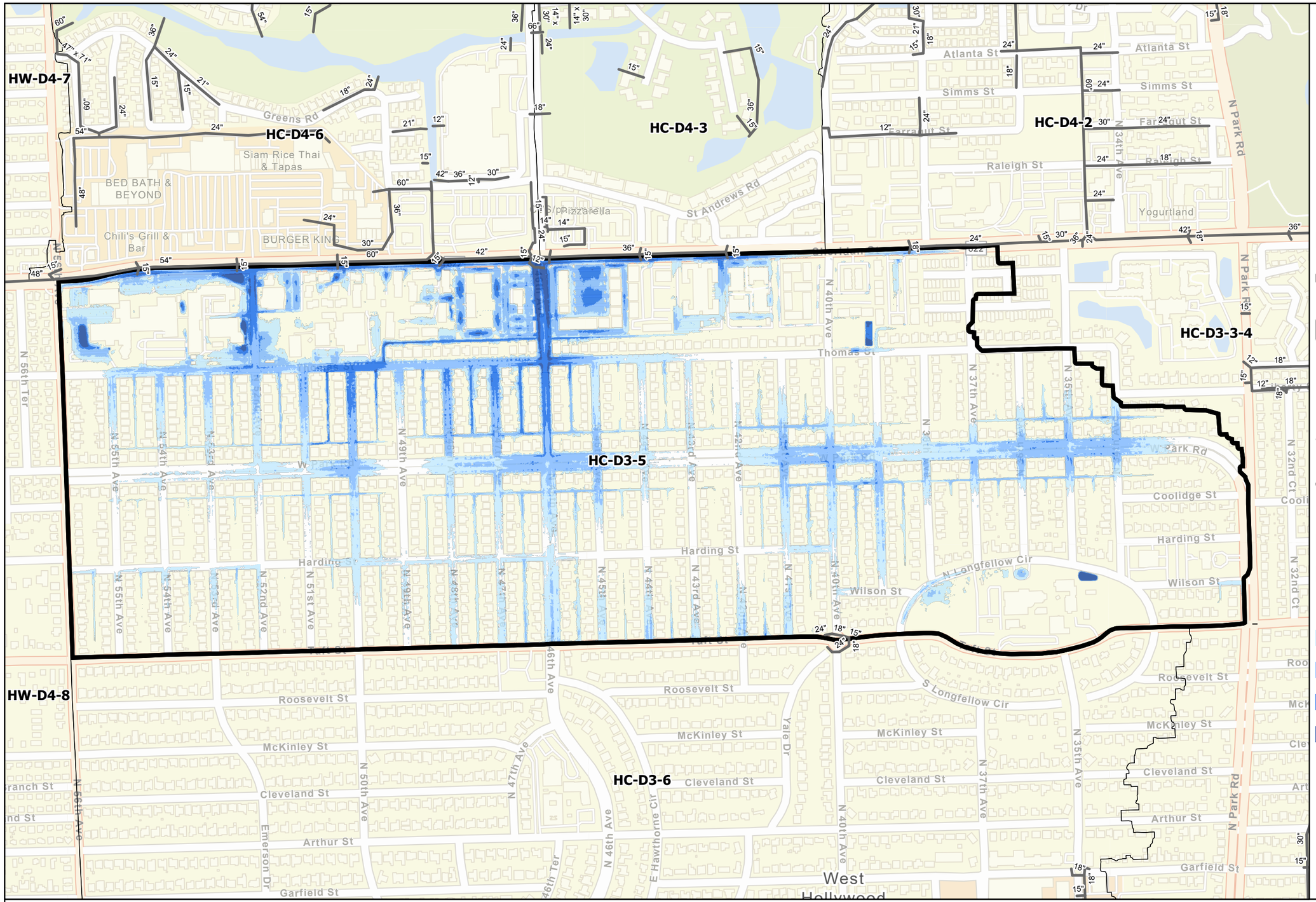

Legend

- 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.

CDM Smith

City of Hollywood Florida

Current Conditions Flooding in CIP Area
Hollywood Hills North
10-year Design Storm

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-5_EC-10

2/28/2023

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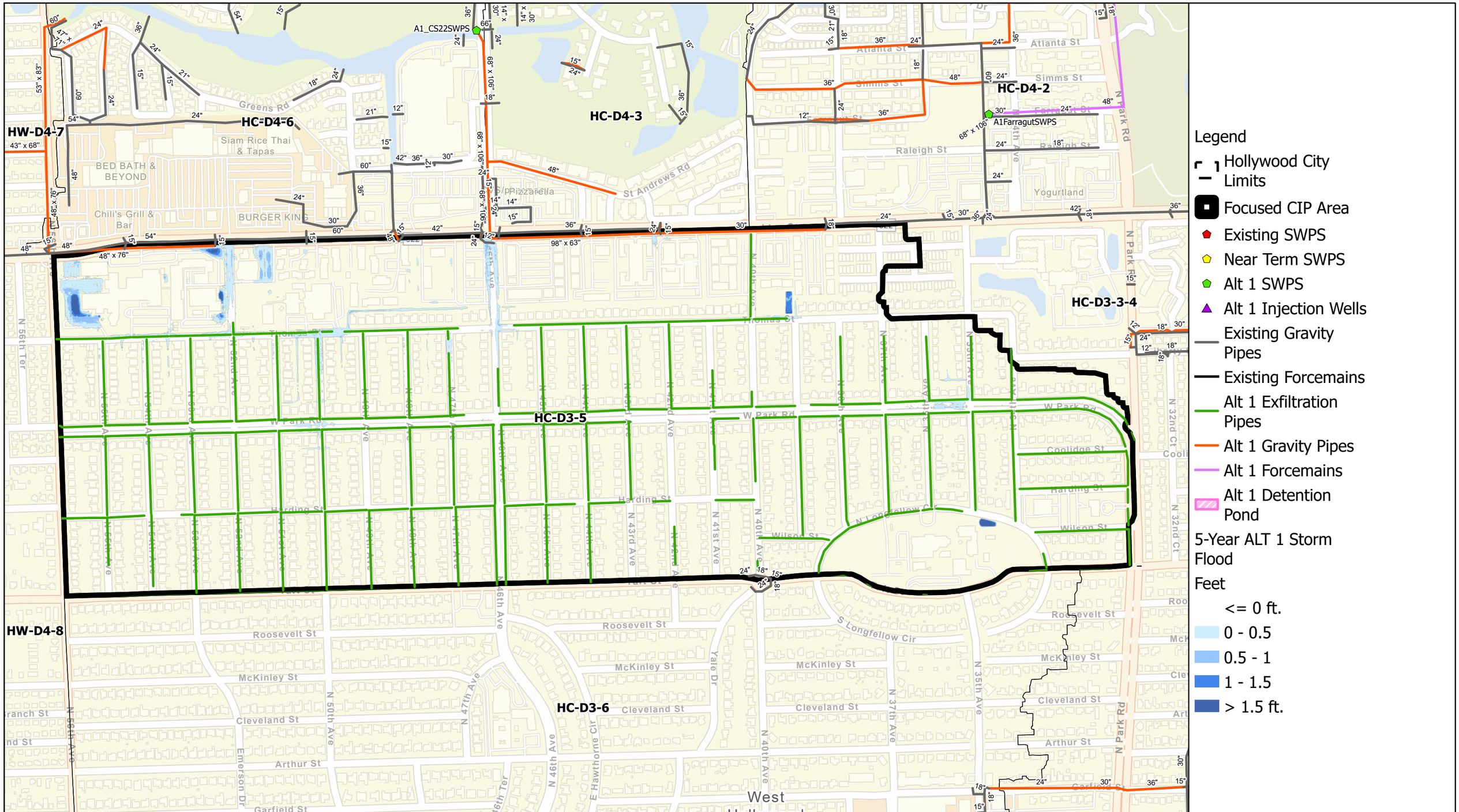

CDM Smith

City of Hollywood Florida

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-5_ALT1-5

2/28/2023

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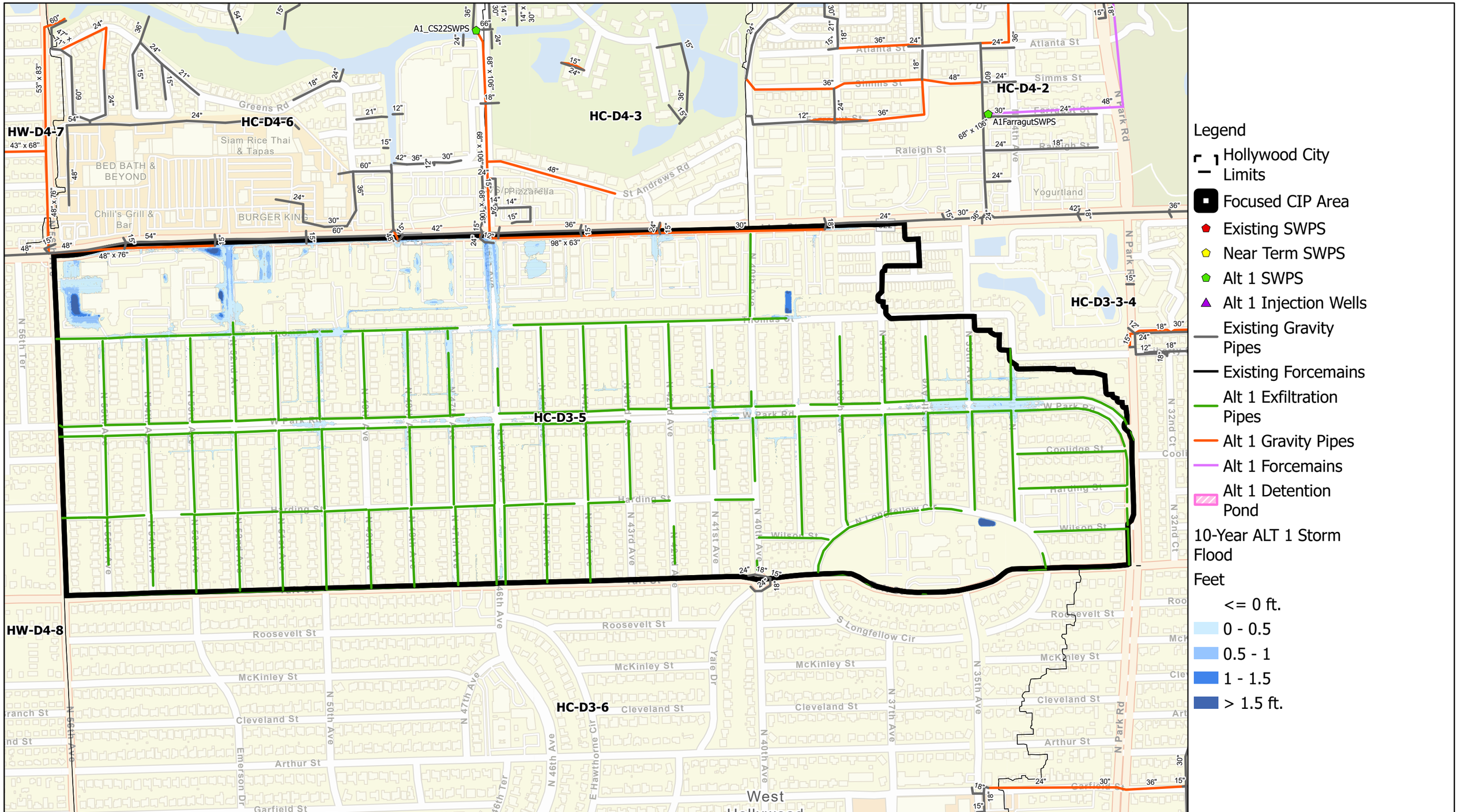

Legend

- Hollywood City Limits
- Focused CIP Area
- Existing SWPS
- Near Term SWPS
- Alt 1 SWPS
- Alt 1 Injection Wells
- Existing Gravity Pipes
- Existing Forcemains
- Alt 1 Exfiltration Pipes
- Alt 1 Gravity Pipes
- Alt 1 Forcemains
- Alt 1 Detention Pond

10-Year ALT 1 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 1 CIP for 10-year Design Storm in CIP Area Hollywood Hills North

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-5_ALT1-10

2/28/2023

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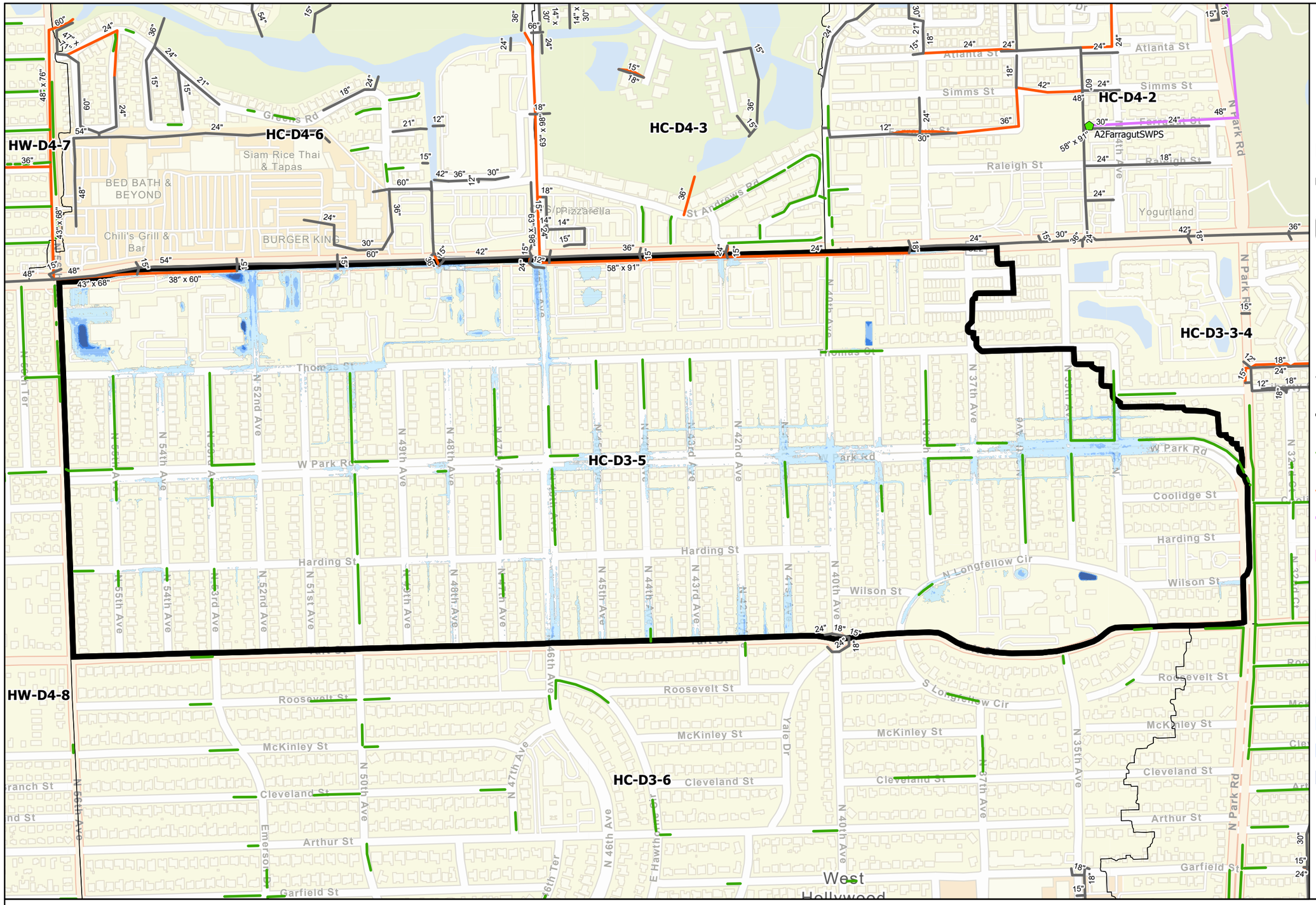

Legend

- 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 Hollywood Hills North

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-5_ALT2-5

2/28/2023

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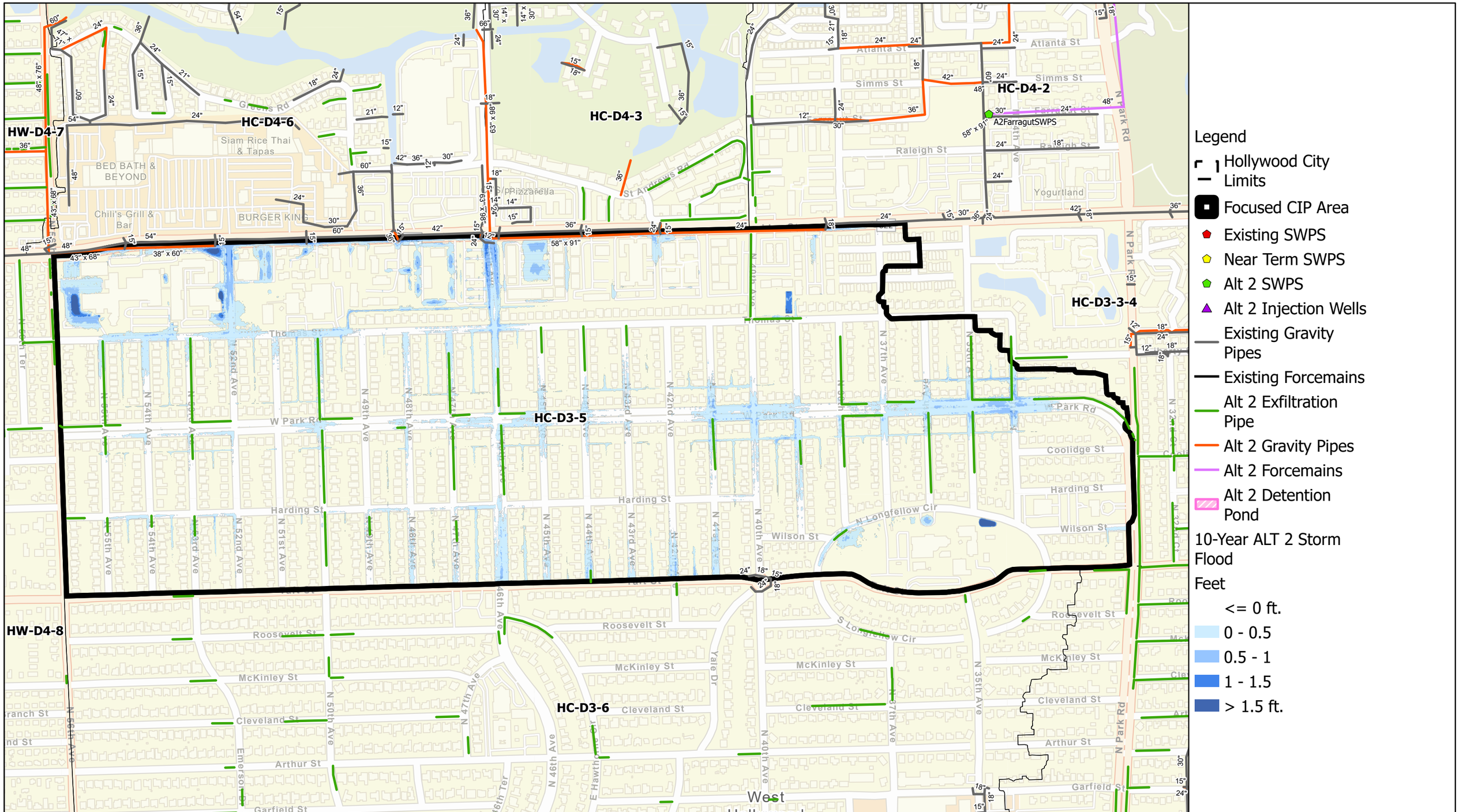

CDM Smith

City of Hollywood Florida

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-5_ALT2-10

2/28/2023

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		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Hills N	
								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	$ -
IN SUBTOTAL									$ -
EXFILTRATION WITH GRAVITY MAINS								Hollywood Hills N	
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	165	$ 7,920
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	1,260	$ 65,520
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	95	$ 11,875
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	2,050	$ 820,000
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	1,300	$ 533,000
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	460	$ 211,600
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	63,107	$ 15,776,750
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	570	$ 17,109,250
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	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL						#N/A		$ 34,535,915
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	68,437	$ 18,477,990
							CONSTRUCTION COST SUBTOTAL		$ 53,013,905
GENERAL CONDITIONS								Hollywood Hills N	
0061		Mobilization				LS	4%	$ 53,013,905	$ 2,120,556
0062		Insurance and General Conditions				LS	2%	$ 53,013,905	$ 1,060,278
0063		Permits/Fees				LS	2%	$ 53,013,905	$ 1,060,278
0064		Maintenance of Traffic				LS	3%	$ 53,013,905	$ 1,590,417
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 53,013,905	$ 7,952,086
0066		Construction Engineering Inspection Costs				LS	4%	$ 53,013,905	$ 2,120,556
0067		OCI Management Cost				LS	15%	$ 53,013,905	$ 7,952,086
0068		Project Contingency Costs				LS	30%	$ 53,013,905	$ 15,904,172
		Land acquisition							
NS SUBTOTAL									$ 39,760,429
TOTAL									$ 92,774,334

		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Hills N	
								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								Hollywood Hills N	
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	1,425	$ 68,400
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	95	$ 7,600
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	720	$ 169,200
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	1,330	$ 492,100
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	1,300	$ 416,000
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	460	$ 188,600
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	14,170	$ 3,542,500
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	163	$ 1,218,750
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								$ 6,103,150
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	19,500	$ 5,265,000
							CONSTRUCTION COST SUBTOTAL		**$ 11,368,150**
GENERAL CONDITIONS								Hollywood Hills N	
0061		Mobilization				LS	**4%**	$ 11,368,150	$ 454,726
0062		Insurance and General Conditions				LS	**2%**	$ 11,368,150	$ 227,363
0063		Permits/Fees				LS	**2%**	$ 11,368,150	$ 227,363
0064		Maintenance of Traffic				LS	**3%**	$ 11,368,150	$ 341,045
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 11,368,150	$ 1,705,223
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 11,368,150	$ 454,726
0067		OCI Management Cost				LS	**15%**	$ 11,368,150	$ 1,705,223
0068		Project Contingency Costs				LS	**30%**	$ 11,368,150	$ 3,410,445
NS SUBTOTAL									$ 8,526,113
TOTAL									**$ 19,894,263**

3.2.2.8 CIP Area HC-D3-6 (Hollywood Hills North Central)

Root Causes of Flooding

This CIP area is characterized by mostly built-out, residential land use. Pockets of low areas collect runoff and flood as water sheet flows from surrounding higher areas.

Alternative 1

Proposed CIP:

- New 36,890 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-1 post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- New 7,210 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-1 post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D3-6 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-D3-6-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D3-6-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D3-6-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D3-6-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D3-6-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D3-6-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**