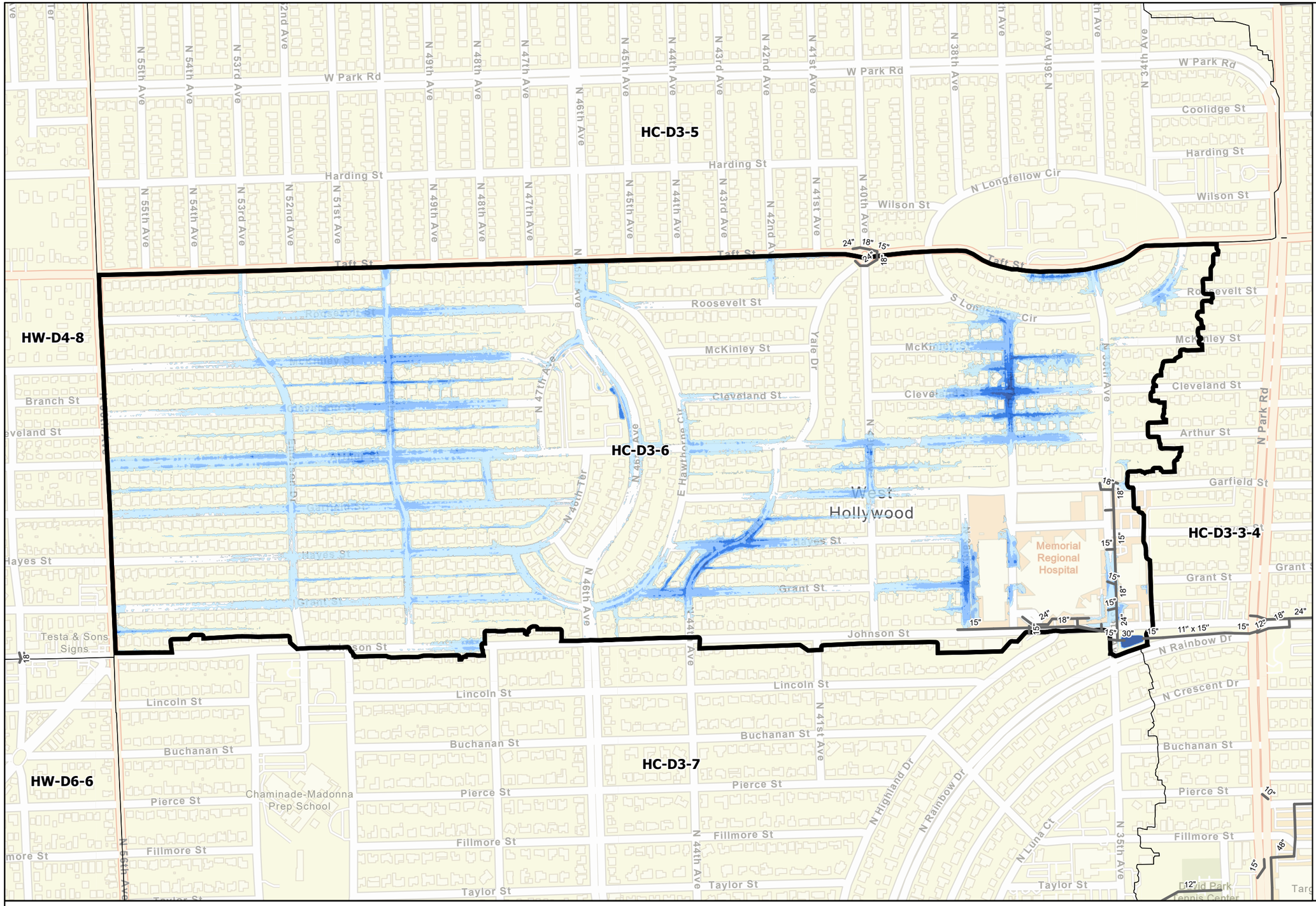

Legend

- 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
Hollywood Hills North Central
5-year Design Storm

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan
HC-D3-6_EC-5
2/28/2023

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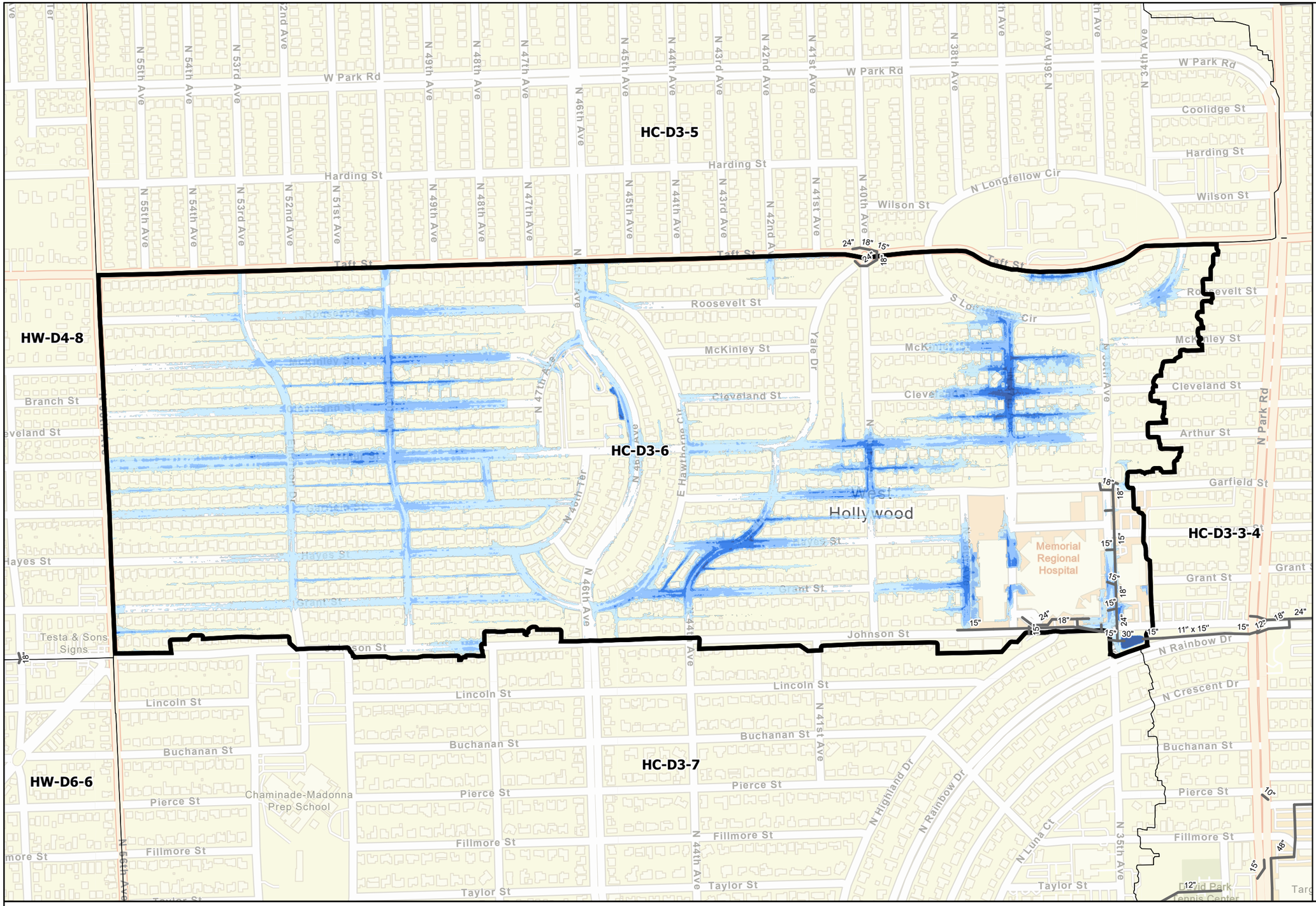

Legend

- 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 Central
10-year Design Storm

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-6_EC-10

2/28/2023

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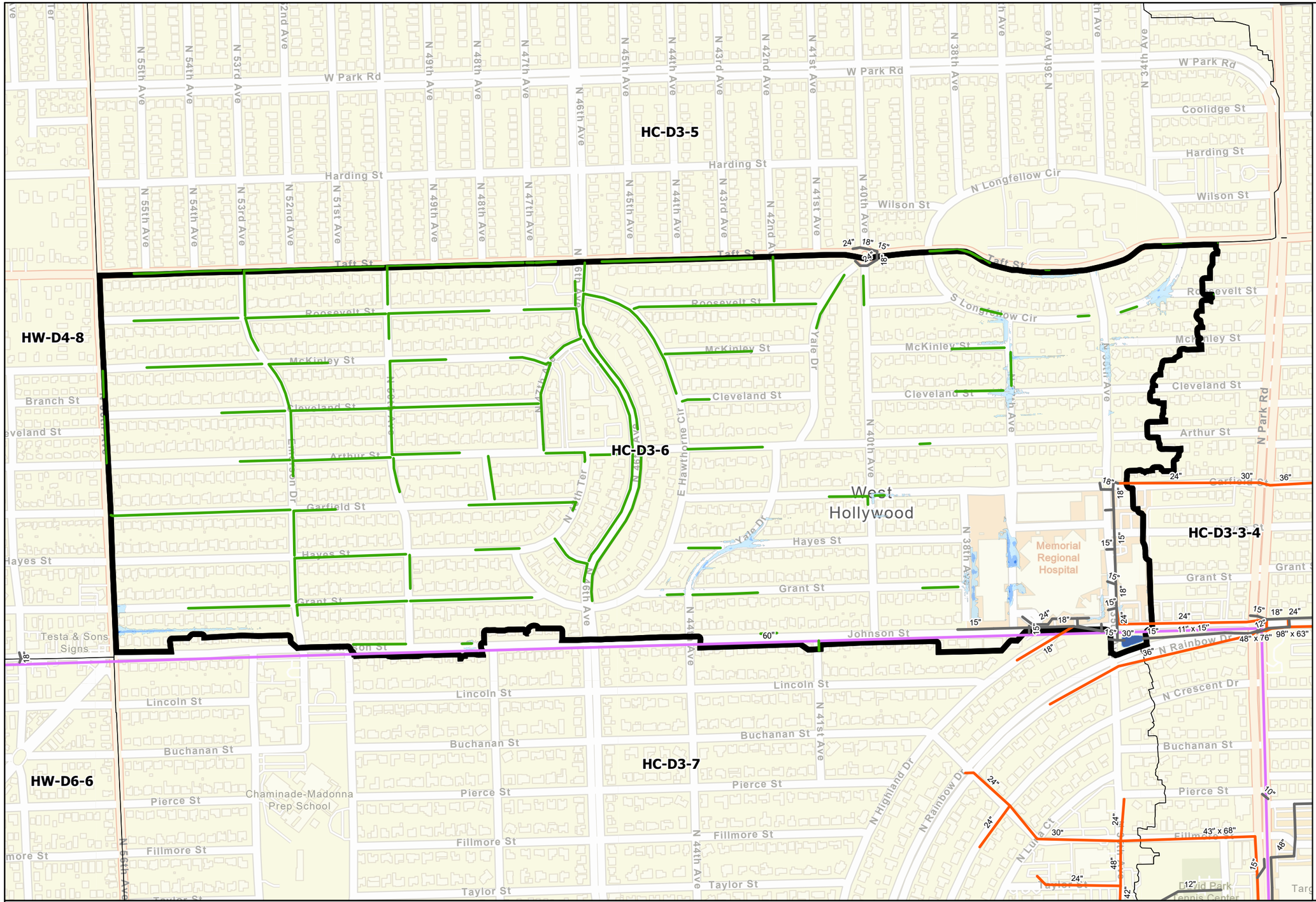

Legend

- 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

5-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 5-year Design Storm in CIP Area
Hollywood Hills North Central

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-6_ALT1-5

2/28/2023

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HC-D3-5
HC-D3-6
HC-D3-7
HC-D3-3-4
HW-D4-8
HW-D6-6
West Hollywood
Memorial Regional Hospital
Chaminade-Madonna Prep School
Testa & Sons Signs
Harding St
Taft St
Roosevelt St
McKinley St
Cleveland St
Arthur St
Garfield St
Hayes St
Grant St
Johnson St
Wilson St
Coolidge St
Lincoln St
Buchanan St
Pierce St
Fillmore St
Taylor St
N Longfellow Cir
S Longfellow Cir
N Crescent Dr
N Rainbow Dr
N Highland Dr
N Park Rd
W Park Rd
Yale Dr
E Hawthorne Cir
N 46th Ave
N 44th Ave
N 41st Ave
N 40th Ave
N 38th Ave
N 55th Ave
N 54th Ave
N 53rd Ave
N 52nd Ave
N 51st Ave
N 49th Ave
N 48th Ave
N 47th Ave
N 45th Ave
N 43rd Ave
N 42nd Ave
N 36th Ave
N 34th Ave
N 15th Ave
N 16th Ter
Branch St
Eveland St
Hayes St
more St

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 Central

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-6_ALT1-10

2/28/2023

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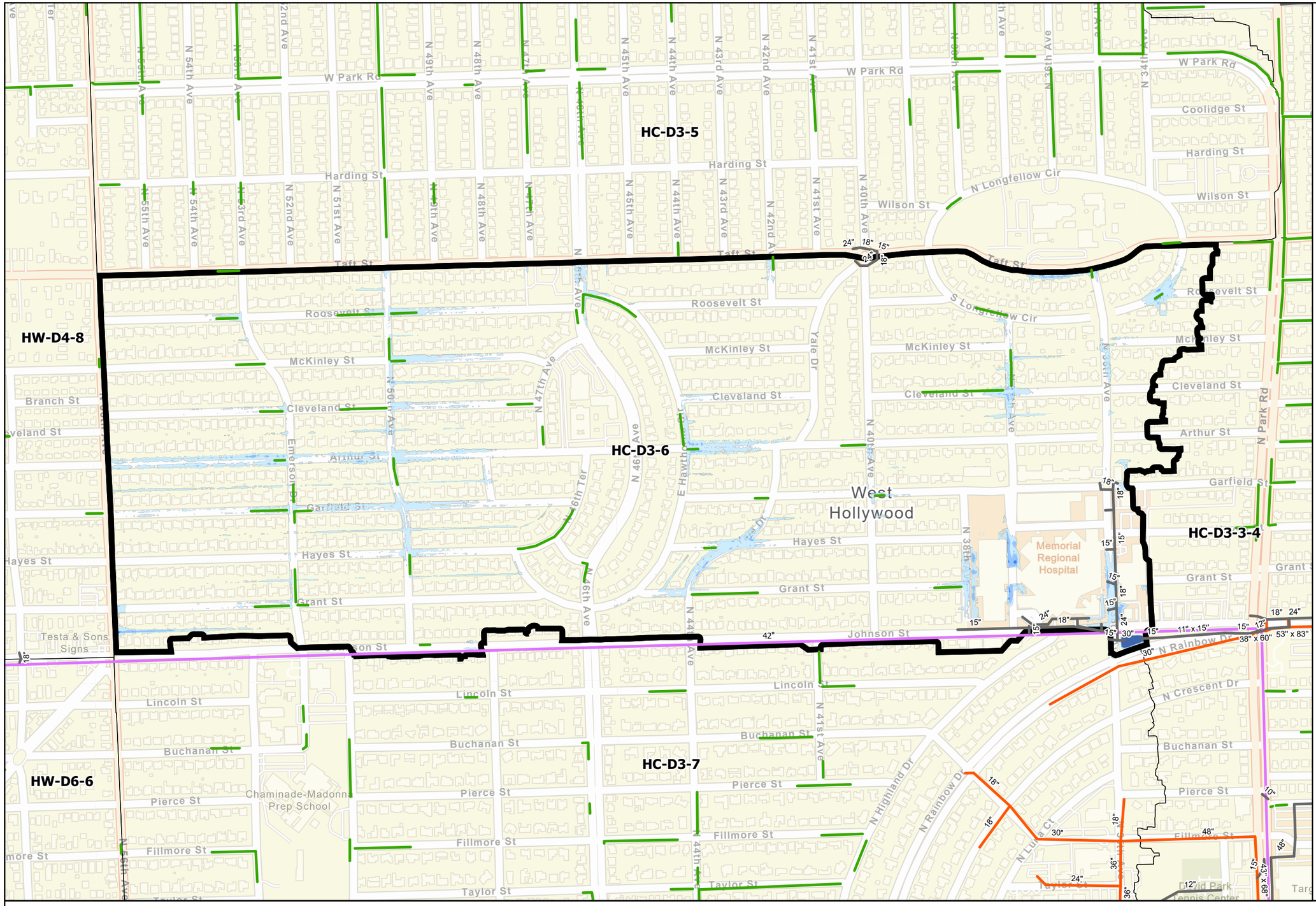

Legend

- 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 Central

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-6_ALT2-5

2/28/2023

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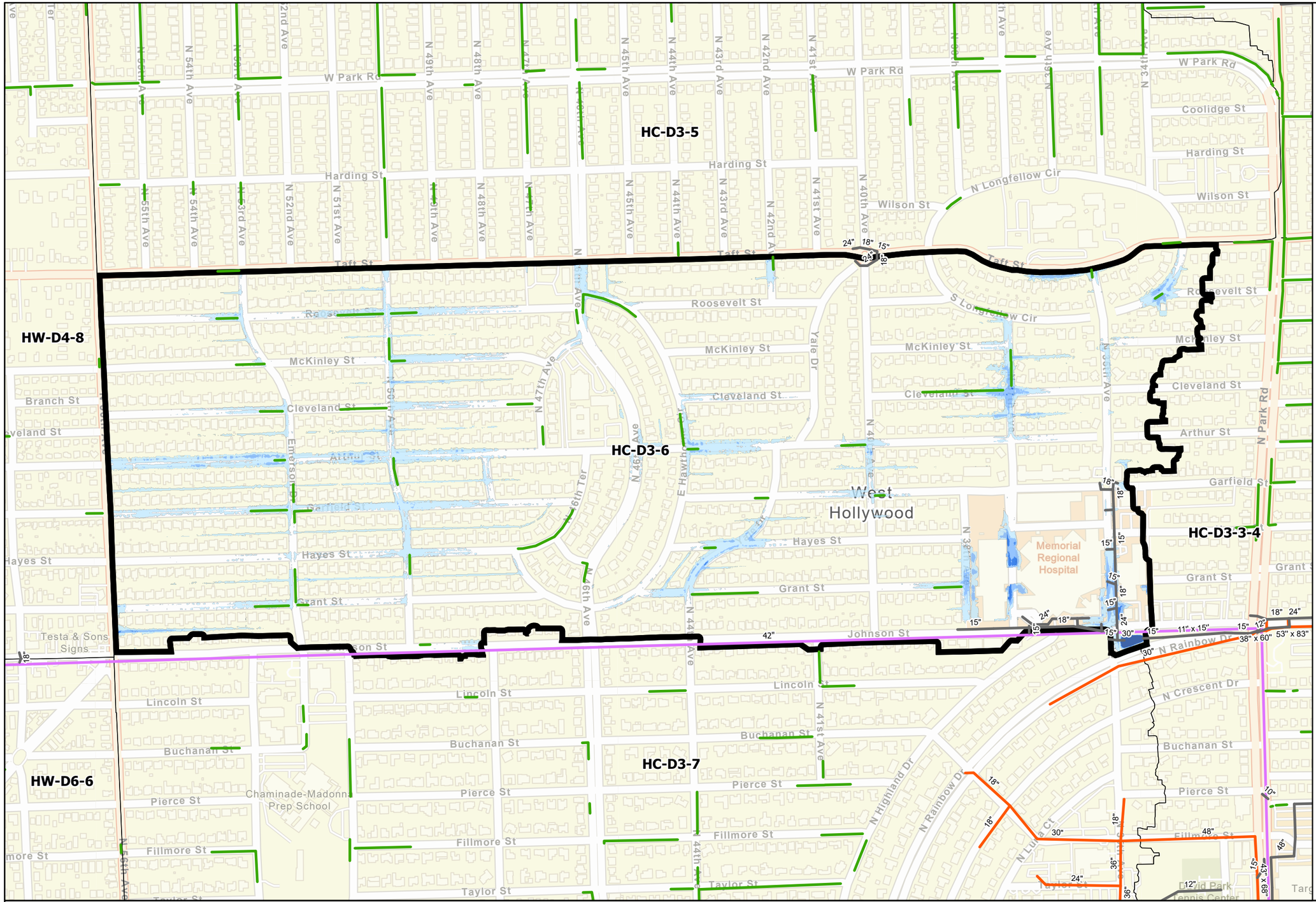

CDM Smith

CITY OF Hollywood FLORIDA

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HC-D3-6_ALT2-10

2/28/2023

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		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Hills NC	
								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								Hollywood Hills NC	
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	36,590	$ 9,147,500
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	305	$ 9,147,500
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	0	$ -
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
GRAVITY MAIN SUBTOTAL							#N/A		$ 18,295,000
0060		Pavement Restoration including Pavement Marking (Full Road)			LF	$	270.00	36,590	$ 9,879,300
							CONSTRUCTION COST SUBTOTAL		**$ 28,174,300**
GENERAL CONDITIONS								Hollywood Hills NC	
0061		Mobilization			LS	**4%**		$ 28,174,300	$ 1,126,972
0062		Insurance and General Conditions			LS	**2%**		$ 28,174,300	$ 563,486
0063		Permits/Fees			LS	**2%**		$ 28,174,300	$ 563,486
0064		Maintenance of Traffic			LS	**3%**		$ 28,174,300	$ 845,229
0065		Engineering Design & CA Oversight Costs			LS	**15%**		$ 28,174,300	$ 4,226,145
0066		Construction Engineering Inspection Costs			LS	**4%**		$ 28,174,300	$ 1,126,972
0067		OCI Management Cost			LS	**15%**		$ 28,174,300	$ 4,226,145
0068		Project Contingency Costs			LS	**30%**		$ 28,174,300	$ 8,452,290
		Land acquisition							
NS SUBTOTAL									$ 21,130,725
TOTAL									**$ 49,305,025**

		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Hills NC	
								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 NC	
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	7,210	$ 1,802,500
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	60	$ 450,625
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								$ 2,253,125
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	7,210	$ 1,946,700
							CONSTRUCTION COST SUBTOTAL		$ 4,199,825
GENERAL CONDITIONS								Hollywood Hills NC	
0061		Mobilization				LS	4%	$ 4,199,825	$ 167,993
0062		Insurance and General Conditions				LS	2%	$ 4,199,825	$ 83,997
0063		Permits/Fees				LS	2%	$ 4,199,825	$ 83,997
0064		Maintenance of Traffic				LS	3%	$ 4,199,825	$ 125,995
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 4,199,825	$ 629,974
0066		Construction Engineering Inspection Costs				LS	4%	$ 4,199,825	$ 167,993
0067		OCI Management Cost				LS	15%	$ 4,199,825	$ 629,974
0068		Project Contingency Costs				LS	30%	$ 4,199,825	$ 1,259,948
NS SUBTOTAL									$ 3,149,869
TOTAL									$ 7,349,694

- **Table HC-D3-6_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D3-6_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.9 CIP Area HC-D3-7 (Hollywood Hills South 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 gravity collection systems and inlets in neighborhoods outfalling to three shared SWPS located in other adjacent CIP areas:
  - Rotary SPWS (D3-4)
  - Lions SWPS (D3-4)
  - ECrawford SWPS (D6-3)
- New 17,338 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-65 post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

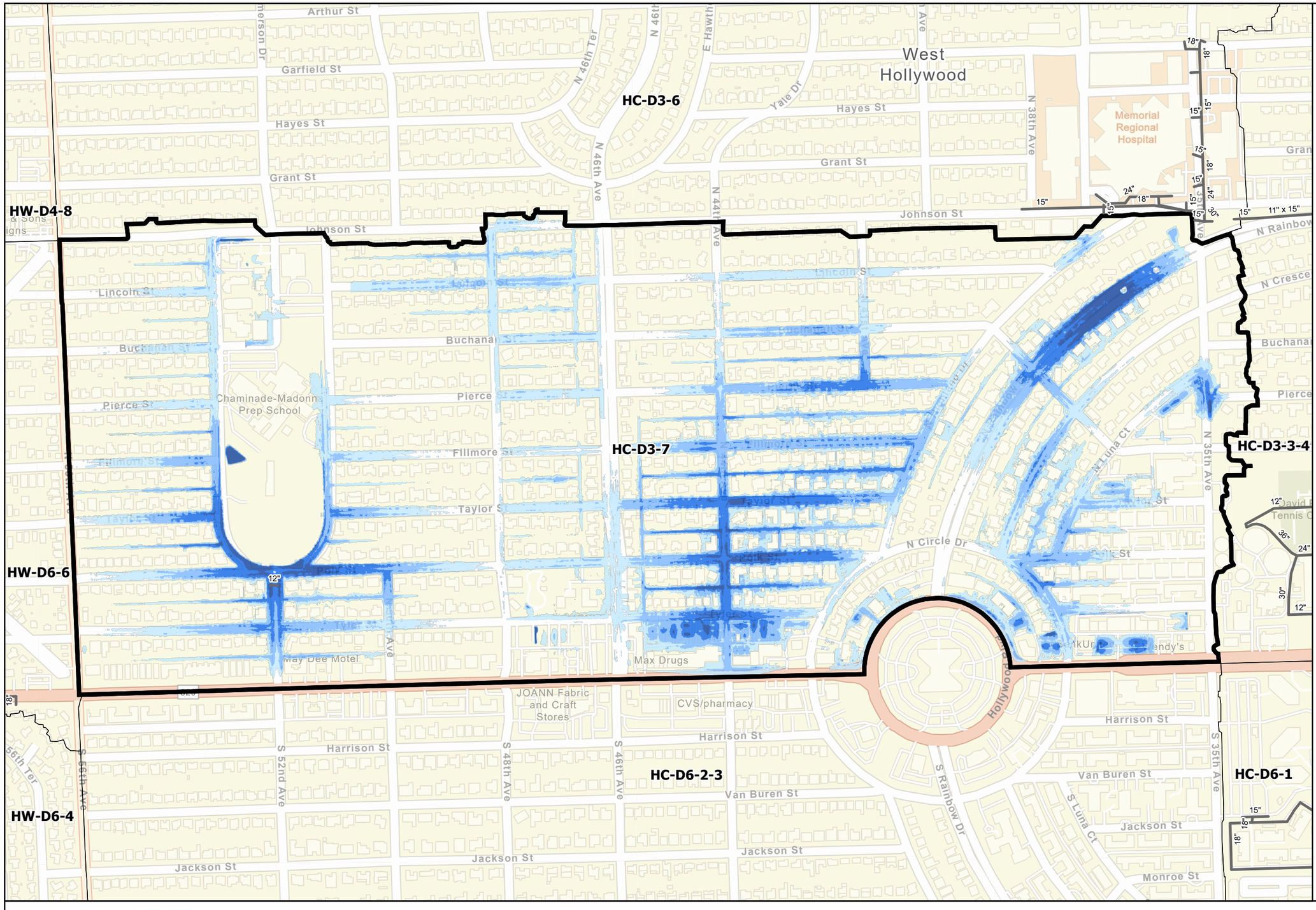
- New gravity collection systems and inlets in neighborhoods outfalling to three shared SWPS located in other adjacent CIP areas:
  - Rotary SPWS (D3-4)
  - Lions SWPS (to D3-4)
  - ECrawford SWPS (D6-3)
- New 9,925 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-65 post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.



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

City of Hollywood Stormwater Master Plan
HC-D3-7_EC-5
2/28/2023

0 295 590 1,180 Feet
1:7,000

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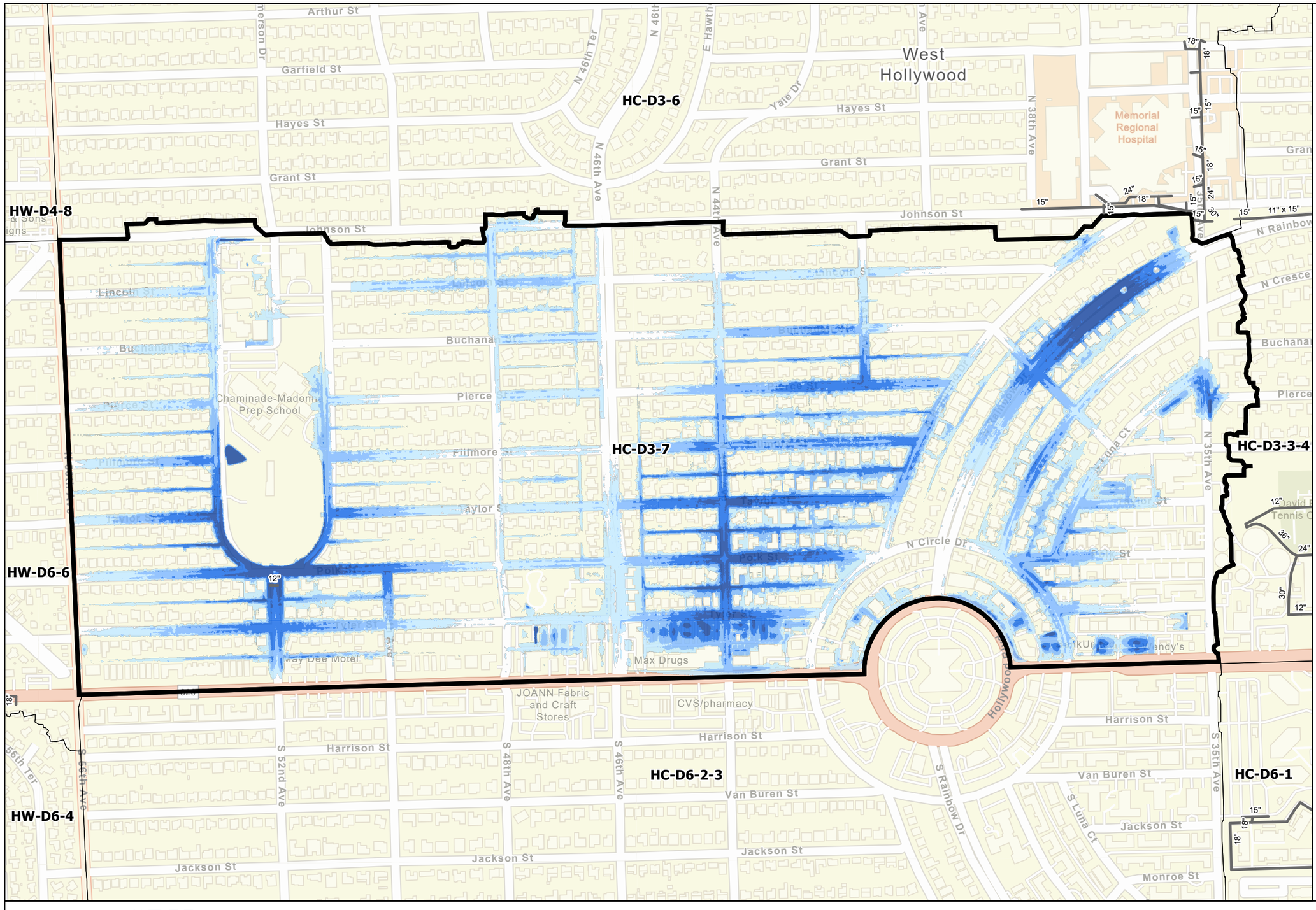


Legend

- 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
Hollywood Hills South Central
10-year Design Storm

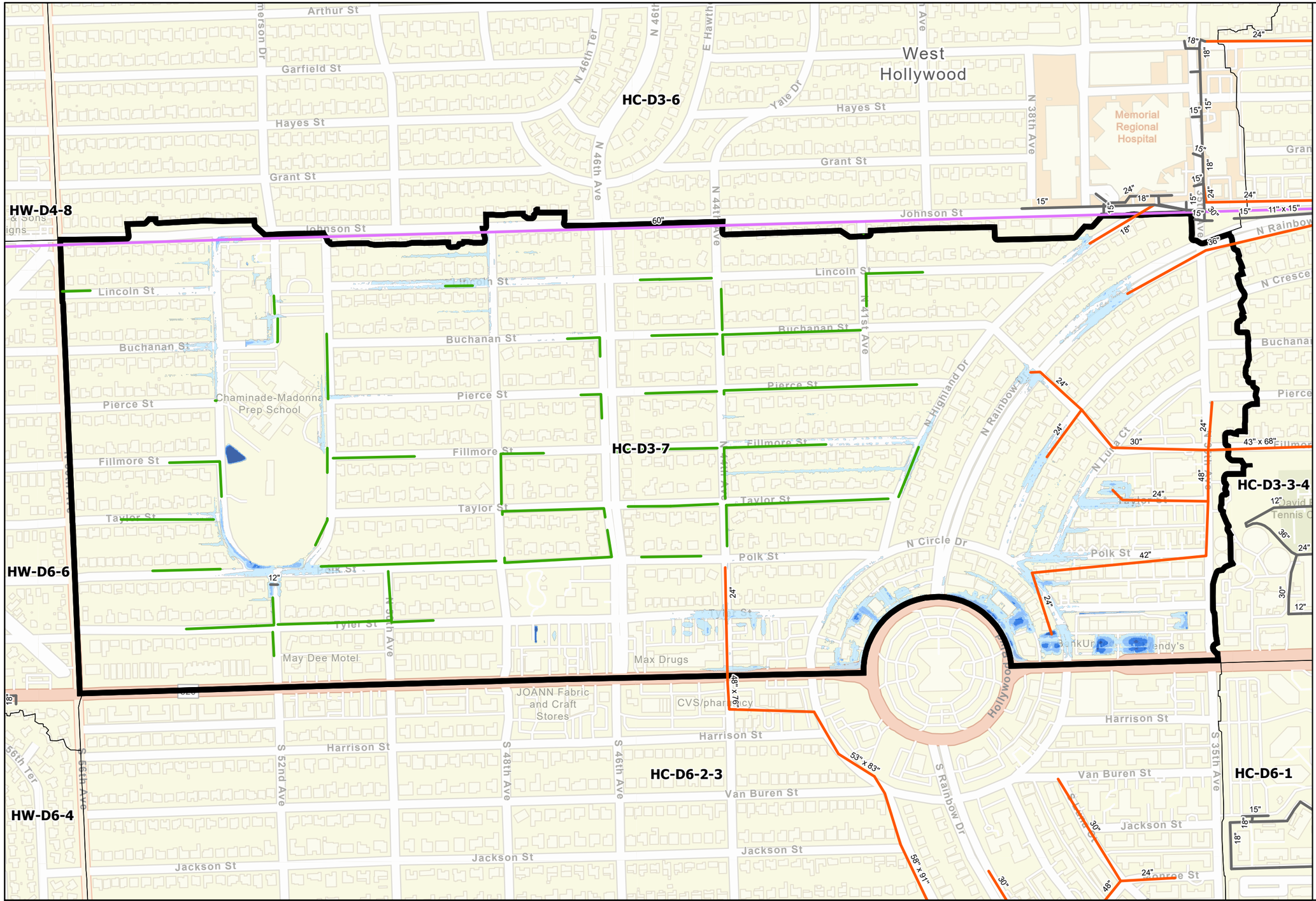
0 295 590 1,180 Feet

1:7,000

City of Hollywood Stormwater Master Plan

HC-D3-7_EC-10

2/28/2023



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

5-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 5-year Design Storm in CIP Area Hollywood Hills South Central

0 295 590 1,180 Feet

1:7,000

City of Hollywood Stormwater Master Plan

HC-D3-7_ALT1-5

2/28/2023

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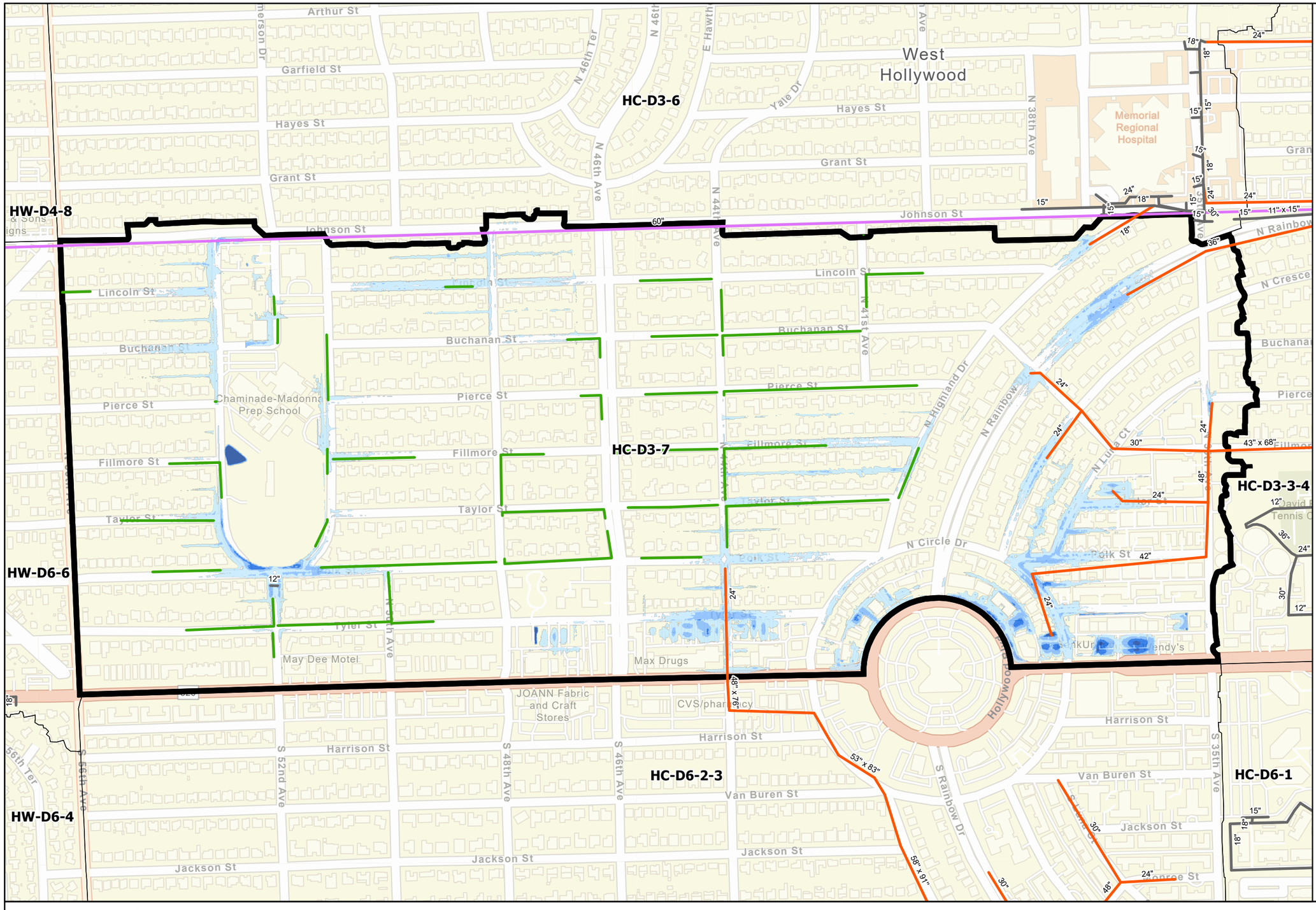

Legend

- 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 South Central

0 295 590 1,180 Feet

1:7,000

City of Hollywood Stormwater Master Plan

HC-D3-7_ALT1-10

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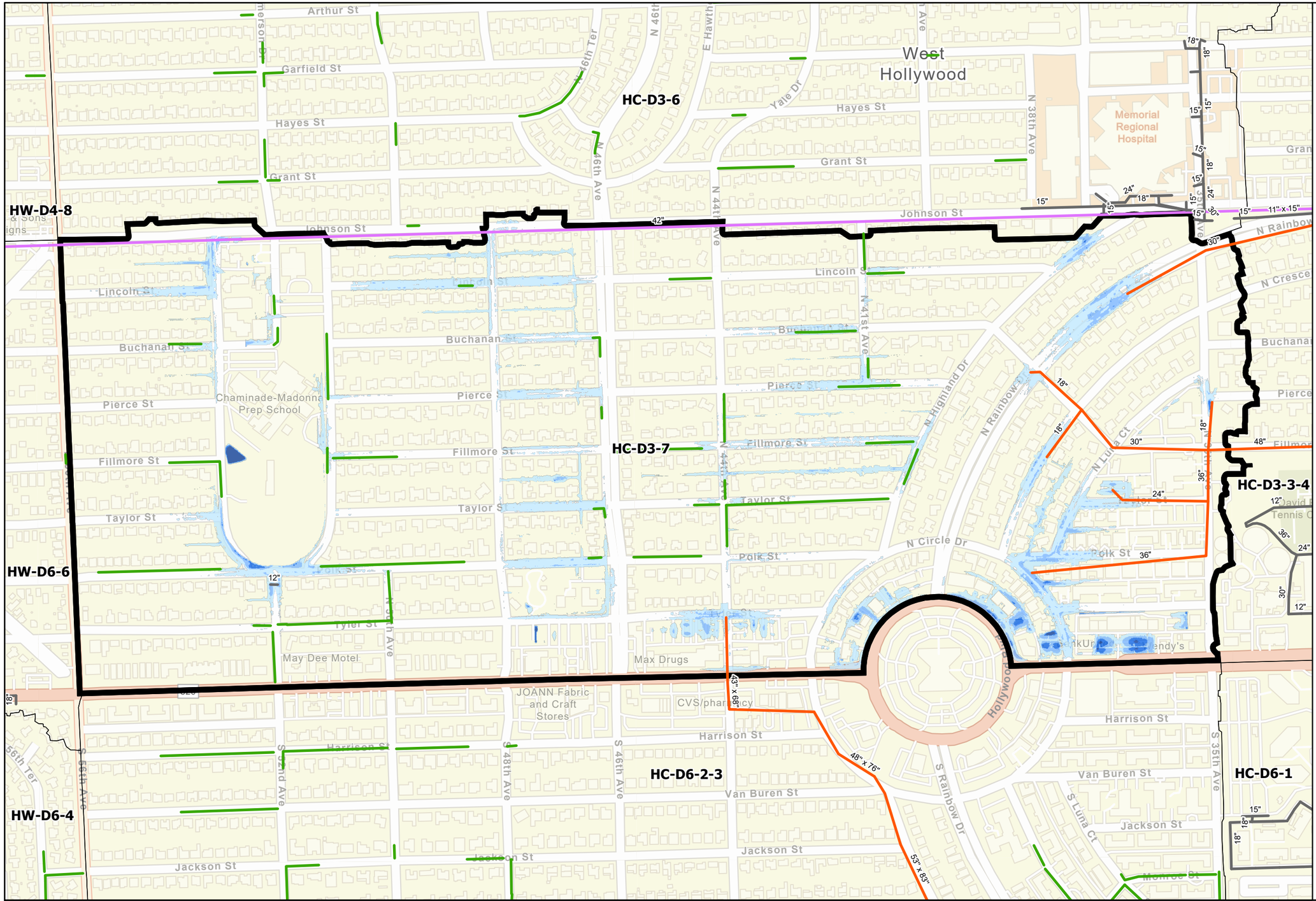

CDM Smith

CITY OF Hollywood FLORIDA

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

0 295 590 1,180 Feet

1:7,000

City of Hollywood Stormwater Master Plan

HC-D3-7_ALT2-5

2/28/2023

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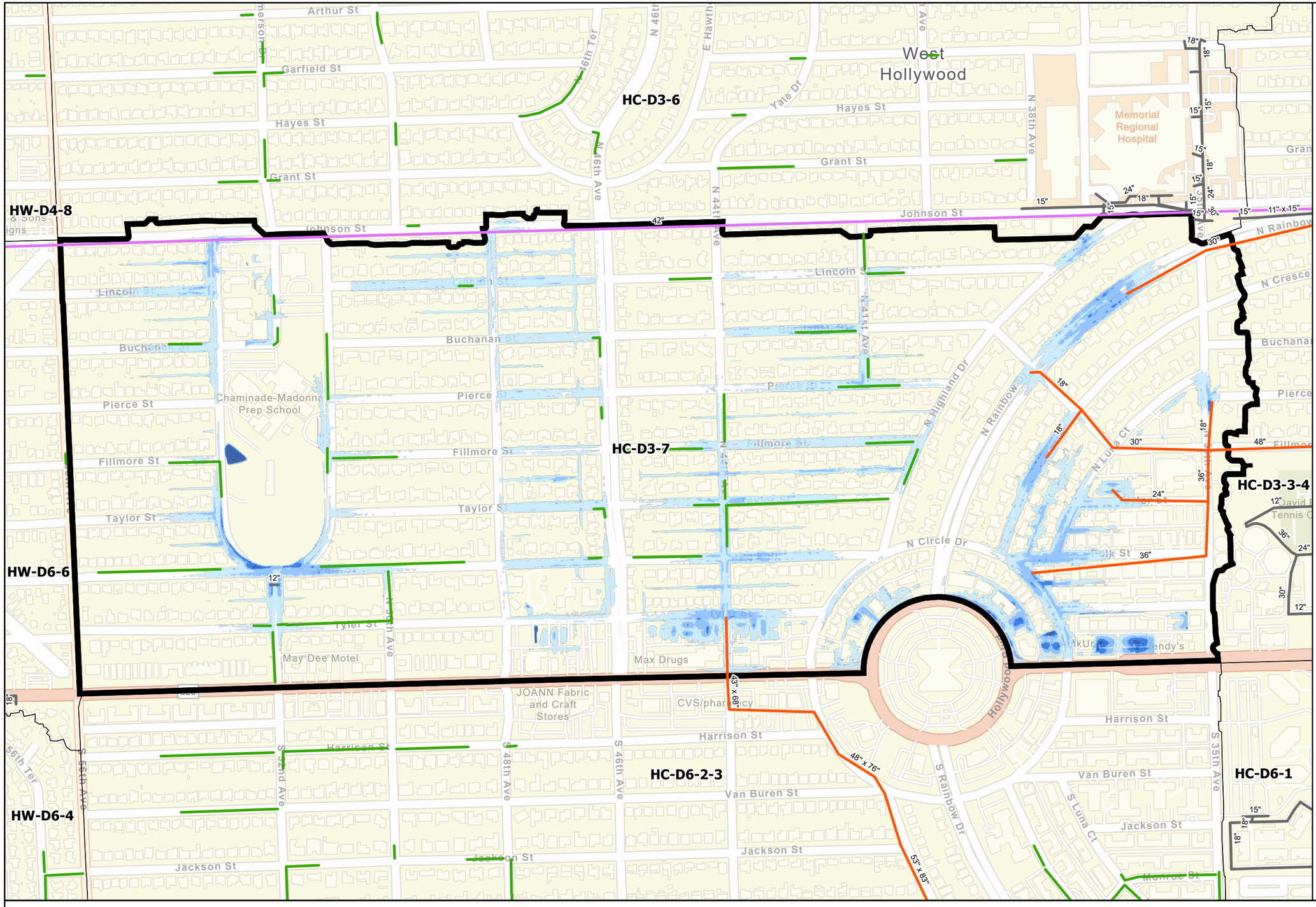

Legend

- 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

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 Hollywood Hills South Central

0 295 590 1,180 Feet

1:7,000

City of Hollywood Stormwater Master Plan

HC-D3-7_ALT2-10

2/28/2023

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		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Hills SC	
								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								Hollywood Hills SC	
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	450	$ 20,250
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	2,380	$ 114,240
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	875	$ 45,500
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	1,550	$ 124,000
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	1,400	$ 161,000
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	310	$ 38,750
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	1,250	$ 462,500
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	460	$ 184,000
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	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	17,338	$ 4,334,500
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	217	$ 6,503,250
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		$ 11,987,990
0060		Pavement Restoration including Pavement Marking (Full Road)			LF	$	270.00	26,014	$ 7,023,780
								CONSTRUCTION COST SUBTOTAL	**$ 19,011,770**
GENERAL CONDITIONS								Hollywood Hills SC	
0061		Mobilization			LS	**4%**		$ 19,011,770	$ 760,471
0062		Insurance and General Conditions			LS	**2%**		$ 19,011,770	$ 380,235
0063		Permits/Fees			LS	**2%**		$ 19,011,770	$ 380,235
0064		Maintenance of Traffic			LS	**3%**		$ 19,011,770	$ 570,353
0065		Engineering Design & CA Oversight Costs			LS	**15%**		$ 19,011,770	$ 2,851,766
0066		Construction Engineering Inspection Costs			LS	**4%**		$ 19,011,770	$ 760,471
0067		OCI Management Cost			LS	**15%**		$ 19,011,770	$ 2,851,766
0068		Project Contingency Costs			LS	**30%**		$ 19,011,770	$ 5,703,531
		Land acquisition							
NS SUBTOTAL									$ 14,258,828
TOTAL									**$ 33,270,598**

		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Hills SC	
								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 SC	
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	1,055	$ 47,475
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	625	$ 30,000
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	2,425	$ 126,100
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	1,710	$ 136,800
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	1,250	$ 156,250
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	70	$ 16,450
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	390	$ 144,300
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	9,925	$ 2,481,250
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	145	$ 1,090,625
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								$ 4,229,250
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	17,450	$ 4,711,500
							CONSTRUCTION COST SUBTOTAL		$ 8,940,750
GENERAL CONDITIONS								Hollywood Hills SC	
0061		Mobilization				LS	4%	$ 8,940,750	$ 357,630
0062		Insurance and General Conditions				LS	2%	$ 8,940,750	$ 178,815
0063		Permits/Fees				LS	2%	$ 8,940,750	$ 178,815
0064		Maintenance of Traffic				LS	3%	$ 8,940,750	$ 268,223
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 8,940,750	$ 1,341,113
0066		Construction Engineering Inspection Costs				LS	4%	$ 8,940,750	$ 357,630
0067		OCI Management Cost				LS	15%	$ 8,940,750	$ 1,341,113
0068		Project Contingency Costs				LS	30%	$ 8,940,750	$ 2,682,225
NS SUBTOTAL									$ 6,705,563
TOTAL									$ 15,646,313

HC-D3-7 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-D3-7-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D3-7-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D3-7-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D3-7-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D3-7-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D3-7-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D3-7_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D3-7_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.10 CIP Area HC-D6-2 & 3 (Hillcrest / Hollywood Hills South)

Root Causes of Flooding

This CIP area is characterized residential and commercial land use. New development is in progress in this area connecting some ponds. Pockets of low areas collect runoff and flood as water sheet flows from surrounding higher areas and there is no positive system serving the area.

Alternative 1

Proposed CIP:

- New Crawford SWPS Type IV at total 360 cfs pumping into the improved storage in the Orangebrook CG detention (see Section 3.2.2.12 CIP Area HC-D6-1 - Parkeast South) via 1,280 l.f. 72-inch FM, located in the City R/O/W at the Earl Crawford Park area.
- New gravity collection systems and inlets in neighborhoods to the new SWPS.
- New 17,150 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-74, post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- New Crawford SWPS Type III at total 270 cfs pumping into the improved storage in the Orangebrook CG detention (see Section 3.2.2.12 CIP Area HC-D6-1 - Parkeast South) via 1,280 l.f. 60-inch FM, located in the City R/O/W at the Earl Crawford Park area.
- New gravity collection systems and inlets in the CIP area neighborhoods to the new SWPS.
- New 17,500 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-74 post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D6-2_3 Pre-Post CIP Flood Inundation Maps

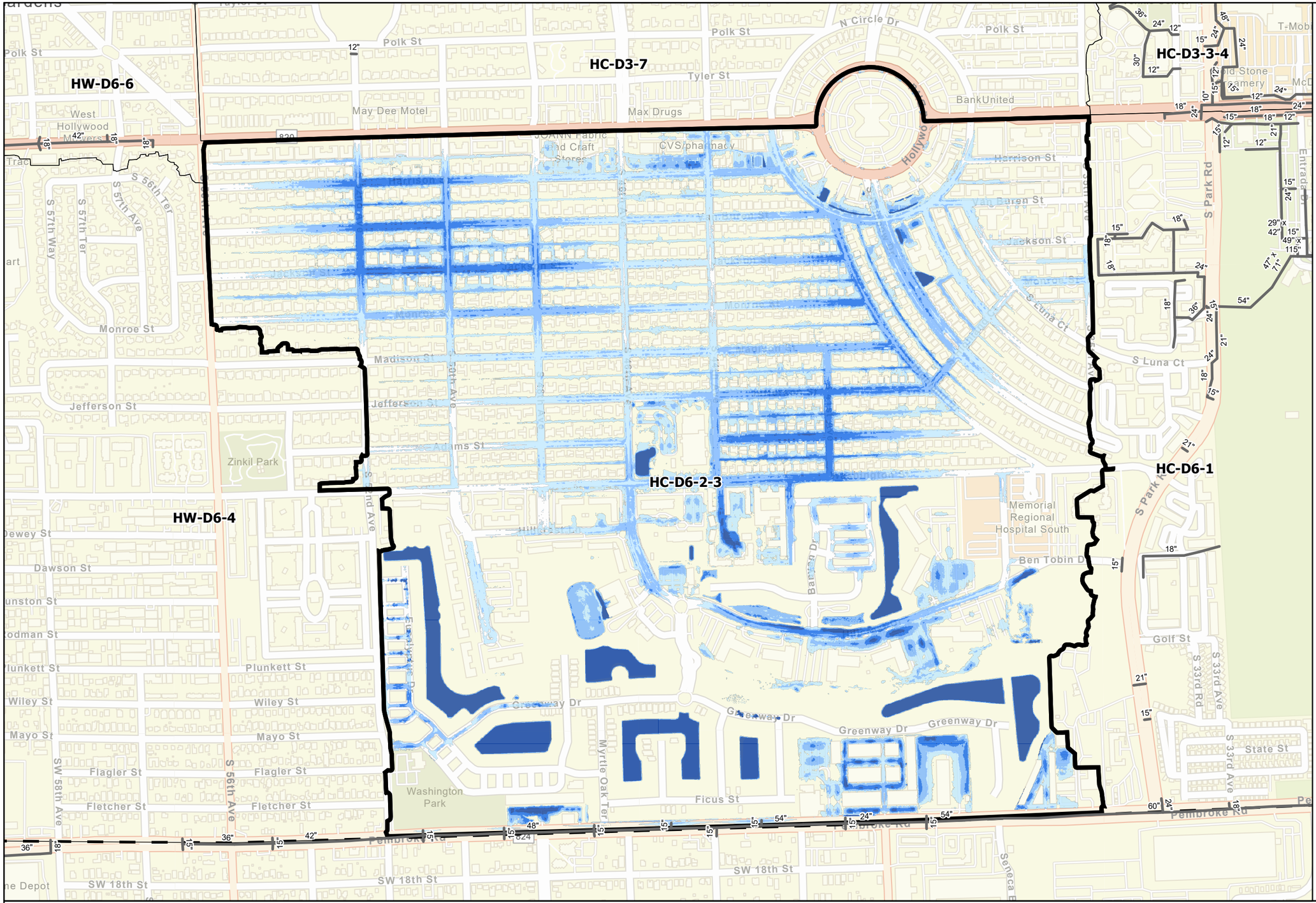
The following figures provide the predicted existing conditions flooding for the 5- and 10-year storm in the CIP Area and the predicted flood reduction for these storms under the Alternatives 1 and 2 CIP:

- **Figure HC-D6-2_3-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D6-2_3-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D6-2_3-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D6-2_3-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D6-2_3-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D6-2_3-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D6-2_3_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D6-2_3_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.11 CIP Area HC-D3-3 & 4 (Parkeast North)

Root Causes of Flooding

This CIP area is characterized by residential and commercial, park, industrial land use. The area slopes west to east and water sheet flows to the C-10 canal. There is a lake with no positive outfall



Current Conditions Flooding in CIP Area
Hillcrest / Hollywood Hills South
5-year Design Storm

City of Hollywood Stormwater Master Plan
HC-D6-2-3_EC-5
2/28/2023

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

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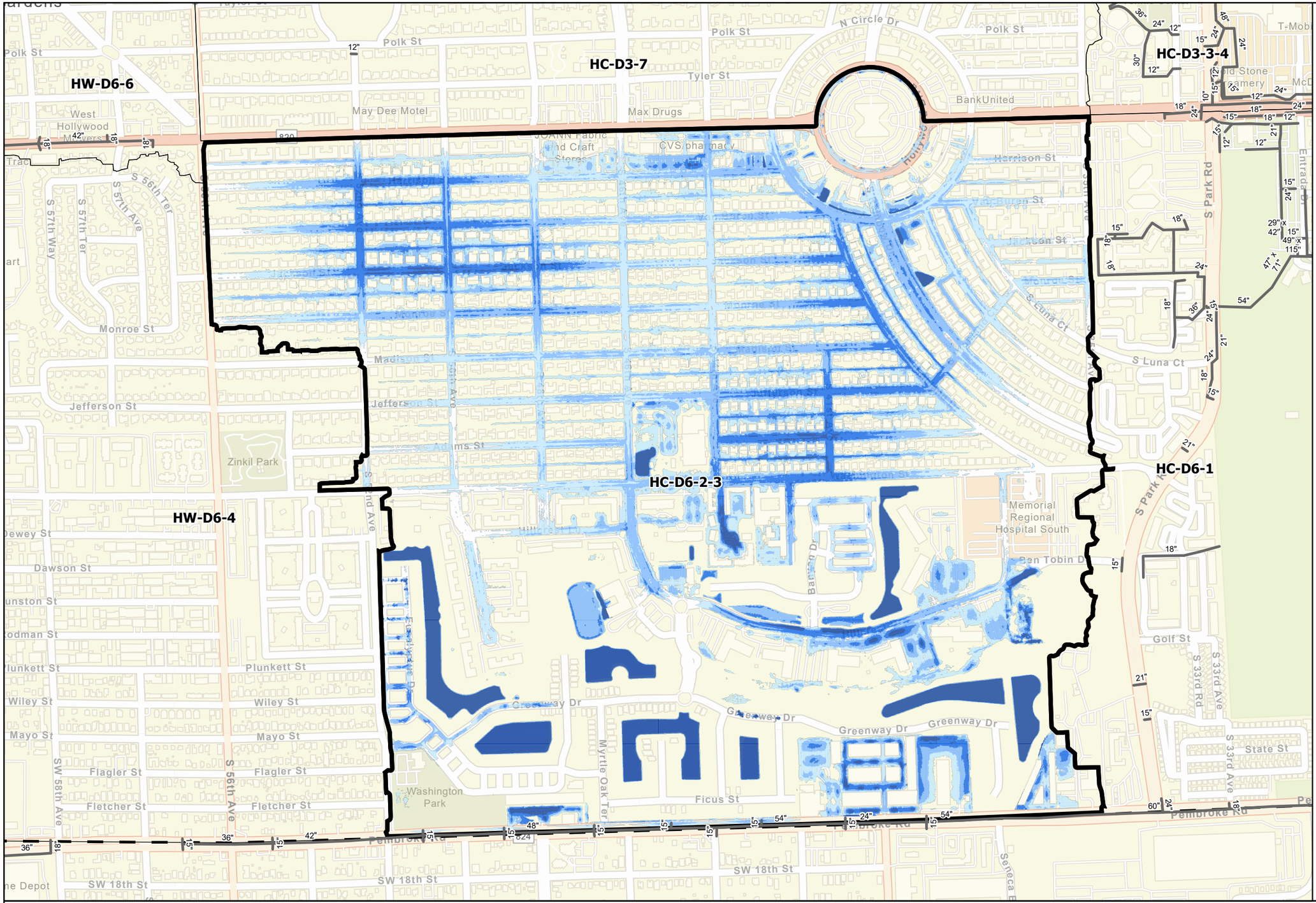


Legend

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

10-Year 72-Hour Storm Flood

Feet

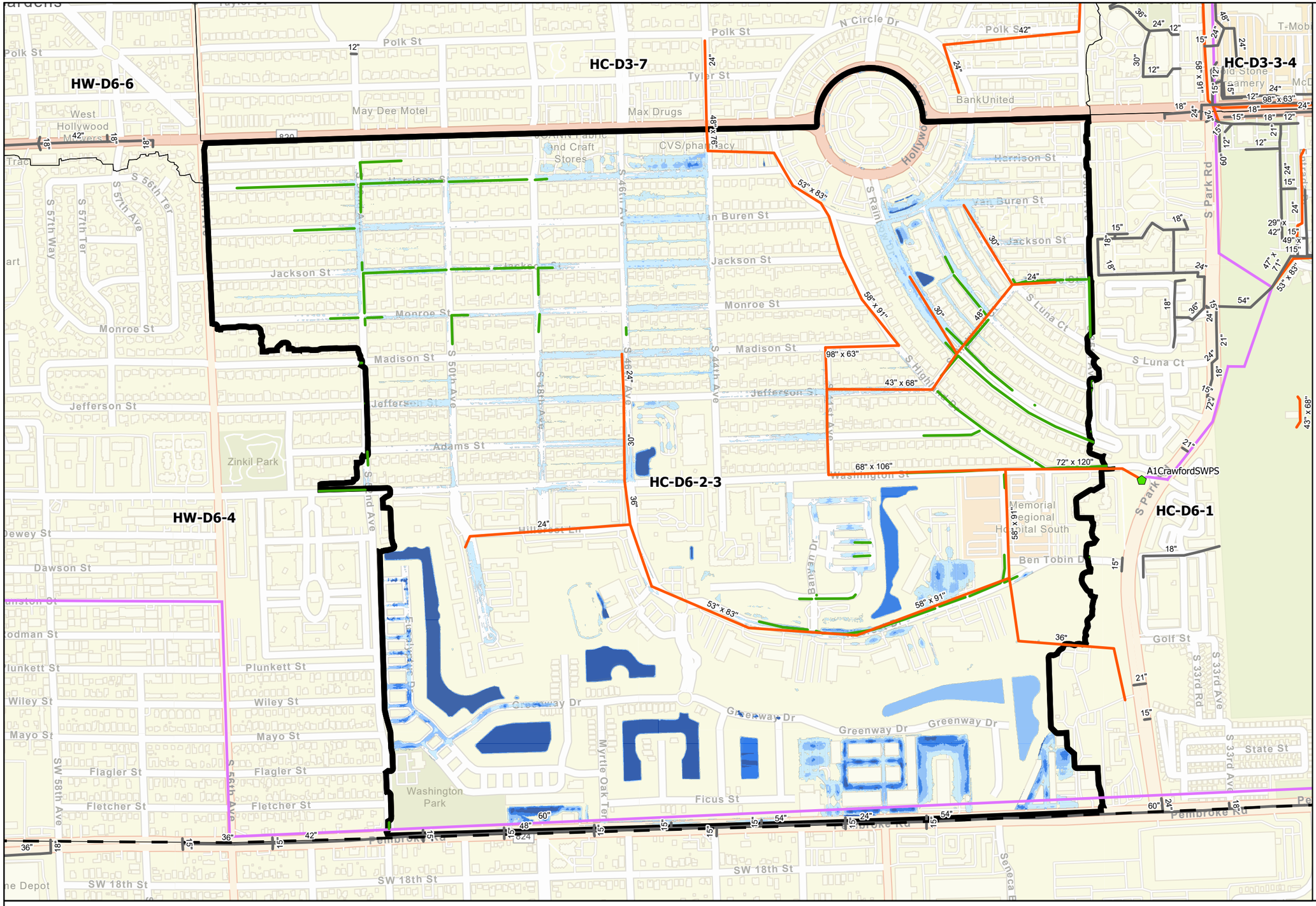
- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

Current Conditions Flooding in CIP Area
Hillcrest / Hollywood Hills South
10-year Design Storm

0 380 760 1,520 Feet

1:9,000

City of Hollywood Stormwater Master Plan
HC-D6-2-3_EC-10
2/28/2023



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

City of Hollywood Stormwater Master Plan
HC-D6-2-3_ALT1-5
2/28/2023

0 380 760 1,520 Feet
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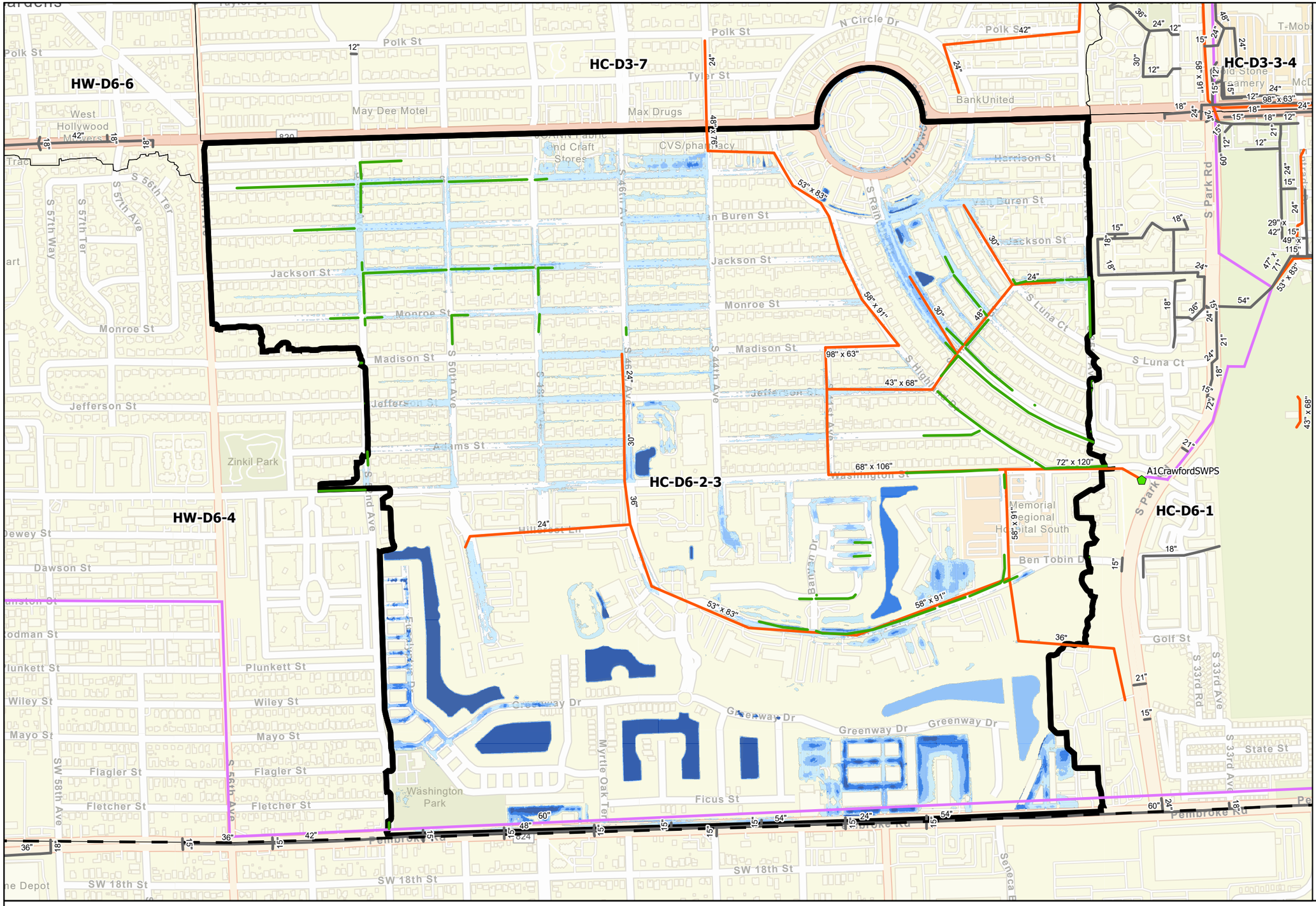

Legend

- 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 Hillcrest / Hollywood Hills South

0 380 760 1,520 Feet

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City of Hollywood Stormwater Master Plan

HC-D6-2-3_ALT1-10

2/28/2023

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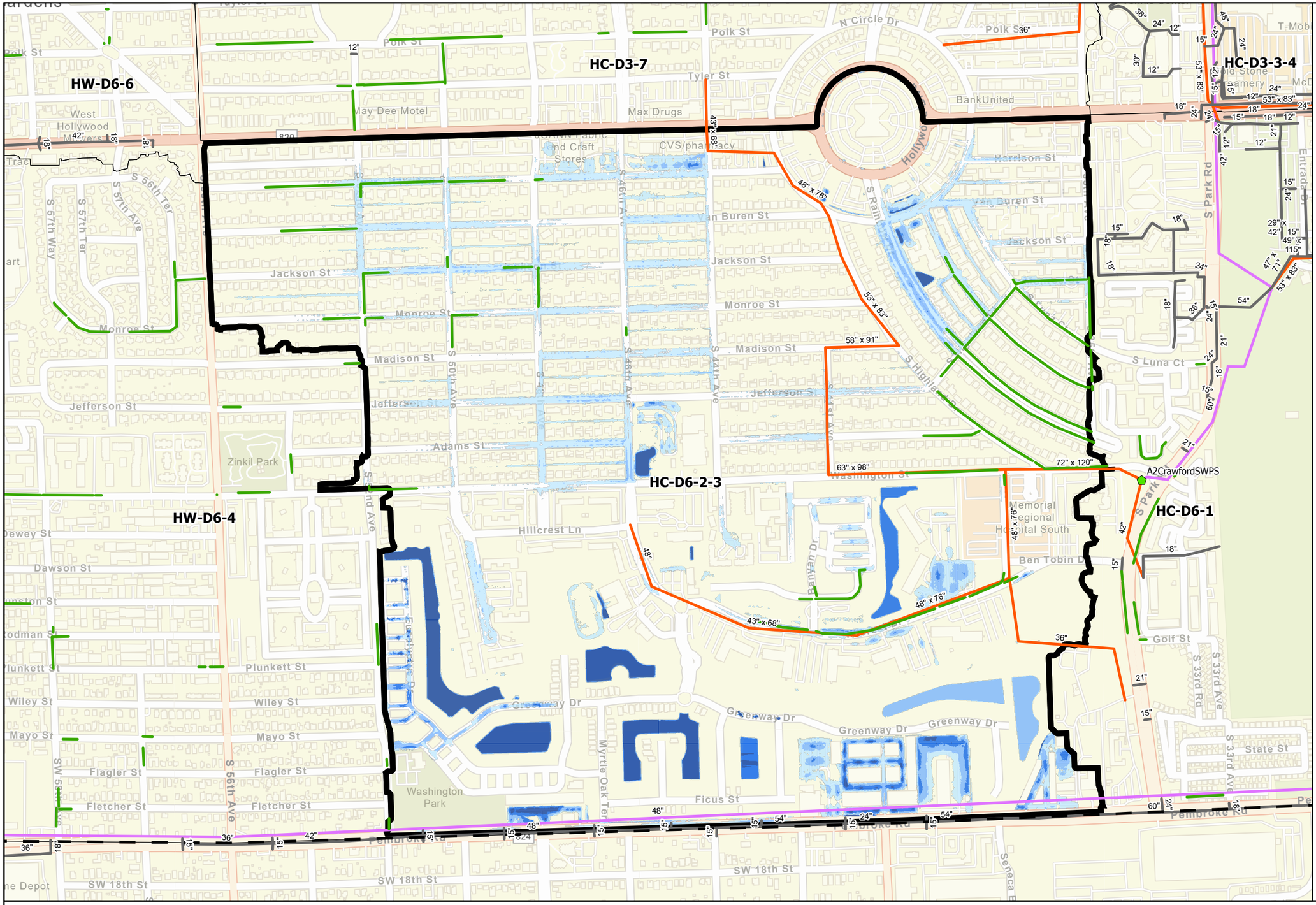

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area
Hillcrest / Hollywood Hills South

City of Hollywood Stormwater Master Plan
HC-D6-2-3_ALT2-5
2/28/2023

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

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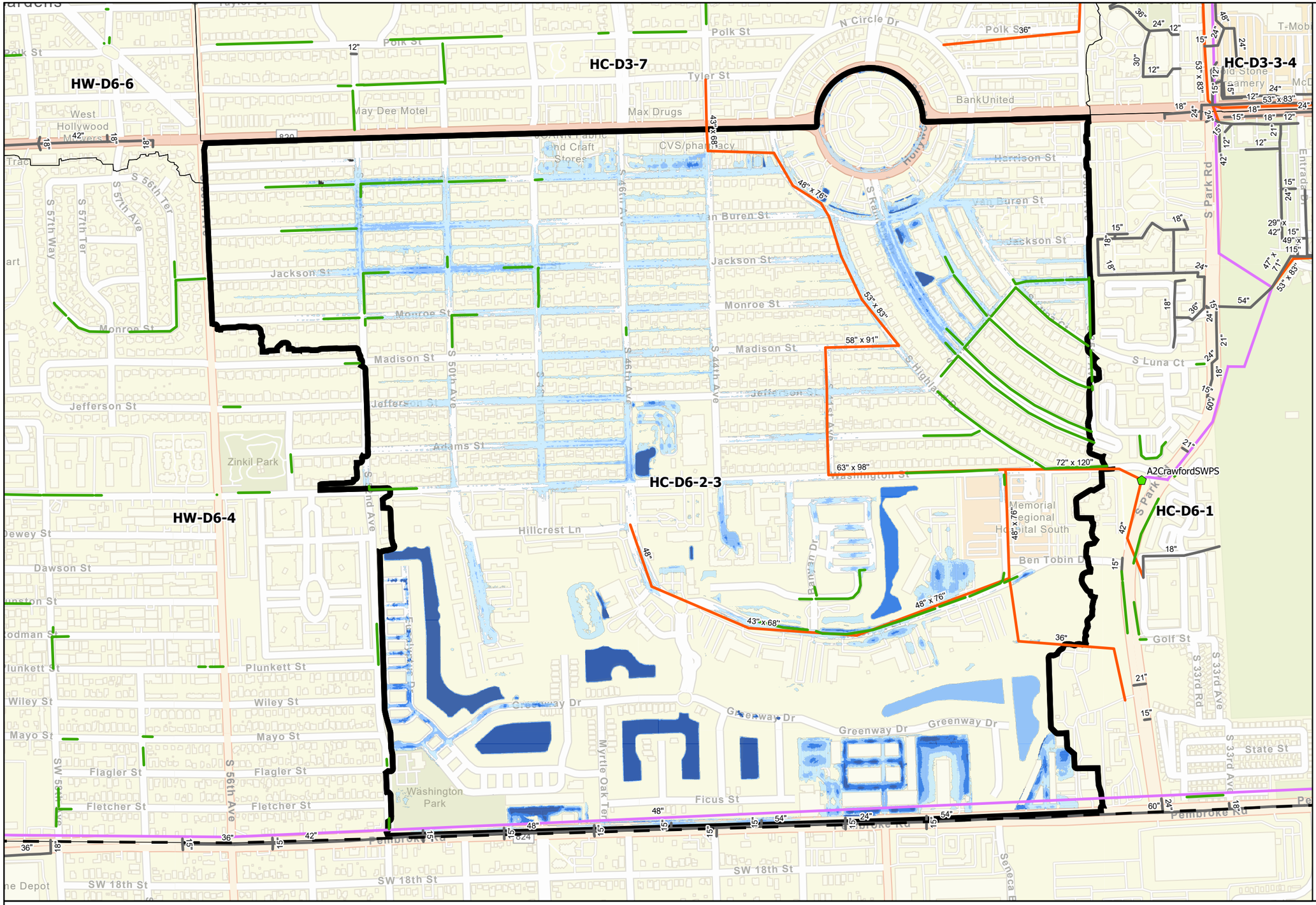

Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area
Hillcrest / Hollywood Hills South

City of Hollywood Stormwater Master Plan
HC-D6-2-3_ALT2-10
2/28/2023

0 380 760 1,520 Feet
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		CONCEPTUAL CAPITAL COST ESTIMATE					Hillcrest and Hollywood Hills S	
							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	1,280	$ 1,885,440
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	1	$ 6,750,000
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS			EA	$ 8,000,000.00	0	$ -
AIN SUBTOTAL								$ 8,635,440
EXFILTRATION WITH GRAVITY MAINS							Hillcrest and Hollywood Hills S	
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	2,035	$ 97,680
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	2,060	$ 107,120
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	2,000	$ 160,000
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	0	$ -
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	690	$ 86,250
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	1,160	$ 429,200
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	680	$ 272,000
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	3,240	$ 1,399,680
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	2,975	$ 952,000
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	900	$ 369,000
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	2,045	$ 940,700
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	1,100	$ 627,000
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	17,147	$ 4,286,750
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	303	$ 9,084,800
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		$ 18,812,180
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	37,312	$ 10,074,240
								CONSTRUCTION COST SUBTOTAL	**$ 37,521,860**
GENERAL CONDITIONS								Hillcrest and Hollywood Hills S	
0061		Mobilization				LS	**4%**	$ 37,521,860	$ 1,500,874
0062		Insurance and General Conditions				LS	**2%**	$ 37,521,860	$ 750,437
0063		Permits/Fees				LS	**2%**	$ 37,521,860	$ 750,437
0064		Maintenance of Traffic				LS	**3%**	$ 37,521,860	$ 1,125,656
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 37,521,860	$ 5,628,279
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 37,521,860	$ 1,500,874
0067		OCI Management Cost				LS	**15%**	$ 37,521,860	$ 5,628,279
0068		Project Contingency Costs				LS	**30%**	$ 37,521,860	$ 11,256,558
		Land acquisition							
NS SUBTOTAL									$ 28,141,395
TOTAL									**$ 65,663,255**

		CONCEPTUAL CAPITAL COST ESTIMATE						Hillcrest and Hollywood Hills S	
								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	1,280	$ 1,470,720
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	1	$ 4,900,000
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									$ 6,370,720
EXFILTRATION WITH GRAVITY MAINS								Hillcrest and Hollywood Hills S	
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	1,650	$ 85,800
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	510	$ 63,750
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	3,615	$ 1,337,550
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	1,920	$ 768,000
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	850	$ 367,200
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	575	$ 184,000
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	2,370	$ 971,700
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	1,100	$ 627,000
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	17,506	$ 4,376,500
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	253	$ 1,900,200
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								$ 10,681,700
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	31,376	$ 8,471,520
								CONSTRUCTION COST SUBTOTAL	$ 25,523,940
GENERAL CONDITIONS								Hillcrest and Hollywood Hills S	
0061		Mobilization				LS	4%	$ 25,523,940	$ 1,020,958
0062		Insurance and General Conditions				LS	2%	$ 25,523,940	$ 510,479
0063		Permits/Fees				LS	2%	$ 25,523,940	$ 510,479
0064		Maintenance of Traffic				LS	3%	$ 25,523,940	$ 765,718
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 25,523,940	$ 3,828,591
0066		Construction Engineering Inspection Costs				LS	4%	$ 25,523,940	$ 1,020,958
0067		OCI Management Cost				LS	15%	$ 25,523,940	$ 3,828,591
0068		Project Contingency Costs				LS	30%	$ 25,523,940	$ 7,657,182
NS SUBTOTAL									$ 19,142,955
TOTAL									$ 44,666,895

which fills rapidly during storms due to the large inflow, and insufficient existing gravity collection systems.

Alternative 1

Proposed CIP:

- Three new SWPS to serve the CIP areas:

  1. New Rotary SWPS Type III at total 270 cfs pumping into the C-10 Canal via 500 l.f. 72-inch FM, located in the City R/O/W at the Rotary Park area.

  2. New Arthur SWPS Type I at total of 10 cfs serving the island neighborhood and pumping into the adjacent ditch to the Hollywood Canal located in the City R/O/W at the street ending located underground in the cul-de-sac.

  3. New Lions SWPS Type III at total 270 cfs pumping into the C-10 Canal located in the City R/O/W in the Lions Park.

- New gravity collection systems and inlets in neighborhoods to the three new SWPS.

- New 18,500 l.f. of exfiltration systems in neighborhoods.

- Raise the seawalls for all waterfront properties along the Hollywood Canal finger canals in this CIP area to:

  - EL 5.25 NAVD (Johnson Street and North) and

  - EL 5.5 NAVD (Johnson Street and South)

  (Note: this is 3-6”” higher than the ordinance height because of the 100-yr storm creating backflow into the canals at high tide/surge which can overwhelm the proposed pumps and result in a significant number of houses to potentially being flooded).

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-19, post seawall-30, post-3

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- Three new SWPS to serve the CIP areas:

  1. New Rotary SWPS Type II at total 220 cfs pumping into the C-10 Canal via 500 l.f. 60-inch FM, located in the City R/O/W at the Rotary Park area.

  2. New Arthur SWPS Type I serving the island neighborhood at total of 5 cfs pumping directly into the ditch to the Hollywood Canal located in the City R/O/W at the street ending underground in the cul-de-sac.

3. New Lions SWPS Type II at total 220 cfs pumping directly into the C-10 Canal located in the City R/O/W in the Lions Park.

- New gravity collection systems and inlets in the CIP Area neighborhoods to the three new SWPS.
- New 16,410 l.f. of exfiltration systems in neighborhoods.
- Raise the seawalls for all waterfront properties along the Hollywood Canal finger canals in this CIP area to:
  - EL 5.25 NAVD (Johnson Street and North), and
  - EL 5.5 NAVD (Johnson Street and South)

  Note: this EL is 3" to 6" higher than the ordinance height because of the 100-yr storm creating backflow into the canals at high tide/surge which can overwhelm the proposed pumps and result in a significant number of houses to potentially being flooded.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-19, post seawall-30, post-4

Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D3-3_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-D3-3_4-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D3-3_4-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D3-3_4-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D3-3_4-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HC-D3-3_4-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D3-3_4-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D3-3_4_ALT1 – Planning Budget for Alternative 1 Proposed CIP**

HC-D4-6
HC-D4-3
HC-D4-2
HC-D4-1
HC-D2-1
HC-D3-5
HC-D3-1
HC-D3-6
HC-D3-3-4
HC-D3-2
HC-D3-7
HE-D2-2
HC-D6-1
HC-D2-6
HE-D2-4
HC-D6-2-3
NC_PS000003
PKE_PS000004
West Hollywood
Hollywood
Memorial Regional Hospital
Sunset Golf Club
Hollywood Plaza
Hollywood Canal
Tri-Rail-Hollywood Station
I-95 Express Ln
Raleigh St
Thomas St
W Park Rd
Harding St
N Longfellow Cir
Taft St
Roosevelt St
Arthur St
Garfield St
Hayes St
Grant St
Johnson St
Lincoln St
Buchanan St
Pierce St
Fillmore St
Taylor St
Polk St
Tyler St
Hollywood Blvd
N Circle Dr
Harrison St
Van Buren St
Sherman St
Liberty St
Scott St
Wilson St
McKinley St
Cleveland St
N 30th Rd
N Park Rd
N 32nd Ct
N 31st Ct
N 32nd Ave
N 35th Ave
N 36th Ave
N 37th Ave
N 38th Ave
N 39th Ave
N 40th Ave
N 41st Ave
N 42nd Ave
N 43rd Ave
N 44th Ave
N 46th Ave
N 47th Ave
N 48th Ave
N 24th Ave
N 25th Ave
N 26th Ave
N 27th Ave
N 28th Ave
N Highland Dr
N Rainbow Dr
N Crescent Dr
N Luna Ct
Yale Dr
E Hawthorne Cir
822
820

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
Parkeast North
5-year Design Storm

0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan
HC-D3-3-4_EC-5
2/28/2023

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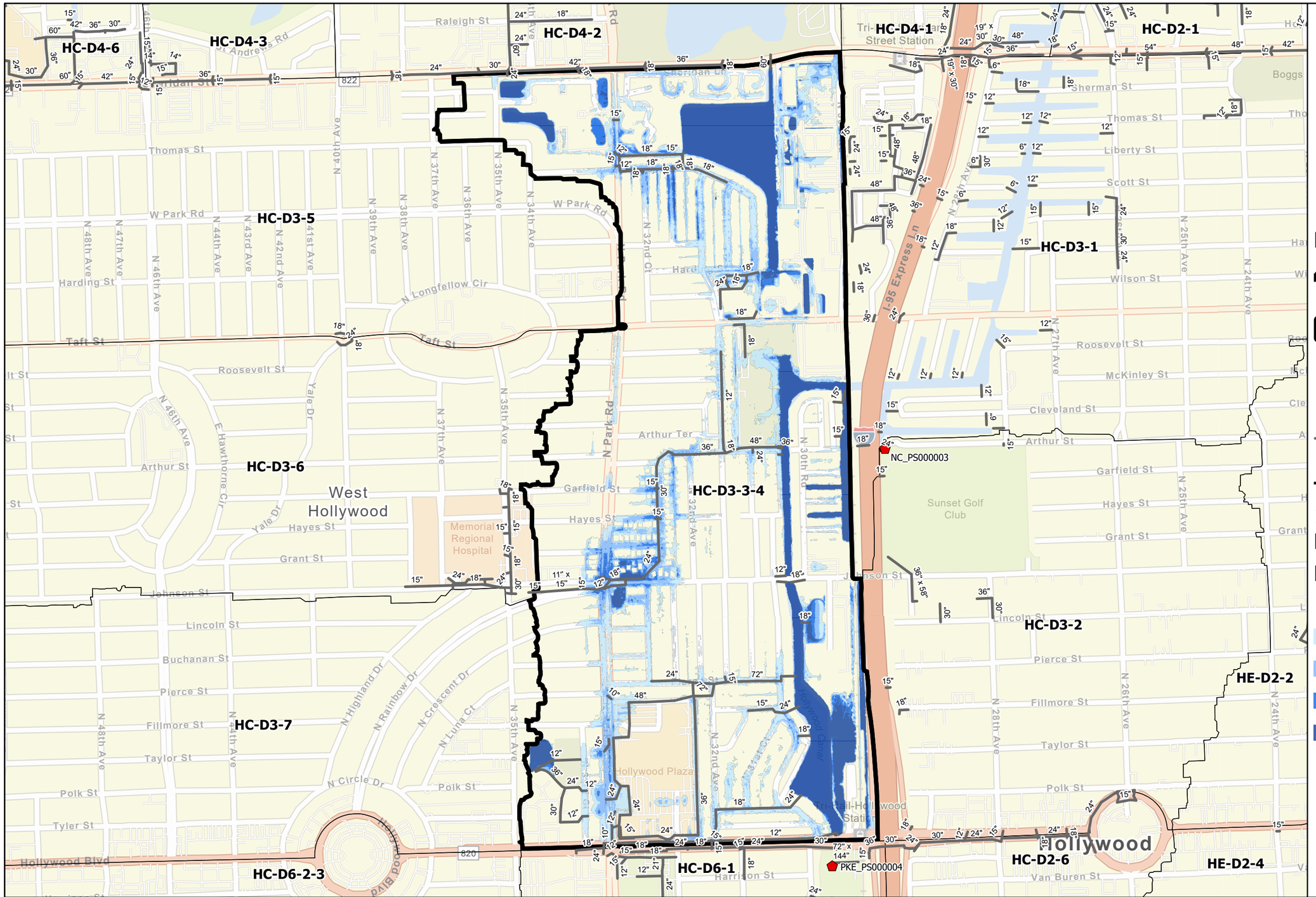

Legend

- 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.

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

0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan
HC-D3-3-4_EC-10
2/28/2023

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HC-D4-6
HC-D4-3
HC-D4-2
HC-D4-1
HC-D2-1
HC-D3-5
HC-D3-1
HC-D3-6
HC-D3-3-4
HC-D3-2
HC-D3-7
HE-D2-2
HC-D6-2-3
HC-D6-1
HC-D2-6
HE-D2-4
A1BruceTerSWPS
A1BoggsSWPS
A1WatergateSWPS
A1RotarySWPS
A1_SWPS_3_Rev
A1ArthurSWPS
A1LionsSWPS
PKE_PS000004
West Hollywood
Hollywood
Raleigh St
Thomas St
W Park Rd
Harding St
N Longfellow Cir
Taft St
Roosevelt St
Arthur St
Garfield St
Hayes St
Grant St
Johnson St
Lincoln St
Buchanan St
Pierce St
Fillmore St
Taylor St
Polk St
Tyler St
Hollywood Blvd
McKinley St
Cleveland St
Van Buren St
Memorial Regional Hospital
Sunset Golf Club
Hollywood Plaza
Hollywood Circle
Tri-Rail/Hollywood Station
I-95 Express Ln
Yale Dr
N Circle Dr
N Highland Dr
N Rainbow Dr
N Park Rd
N 40th Ave
N 39th Ave
N 38th Ave
N 37th Ave
N 36th Ave
N 35th Ave
N 34th Ave
N 32nd Ave
N 31st Ct
N 48th Ave
N 47th Ave
N 46th Ave
N 44th Ave
N 43rd Ave
N 42nd Ave
N 41st Ave
N 28th Ave
N 27th Ave
N 26th Ave
N 25th Ave
N 24th Ave
E Hawthorne Cir
820

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

5-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 5-year Design Storm in CIP Area
Parkeast North

0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan
HC-D3-3-4_ALT1-5
2/28/2023

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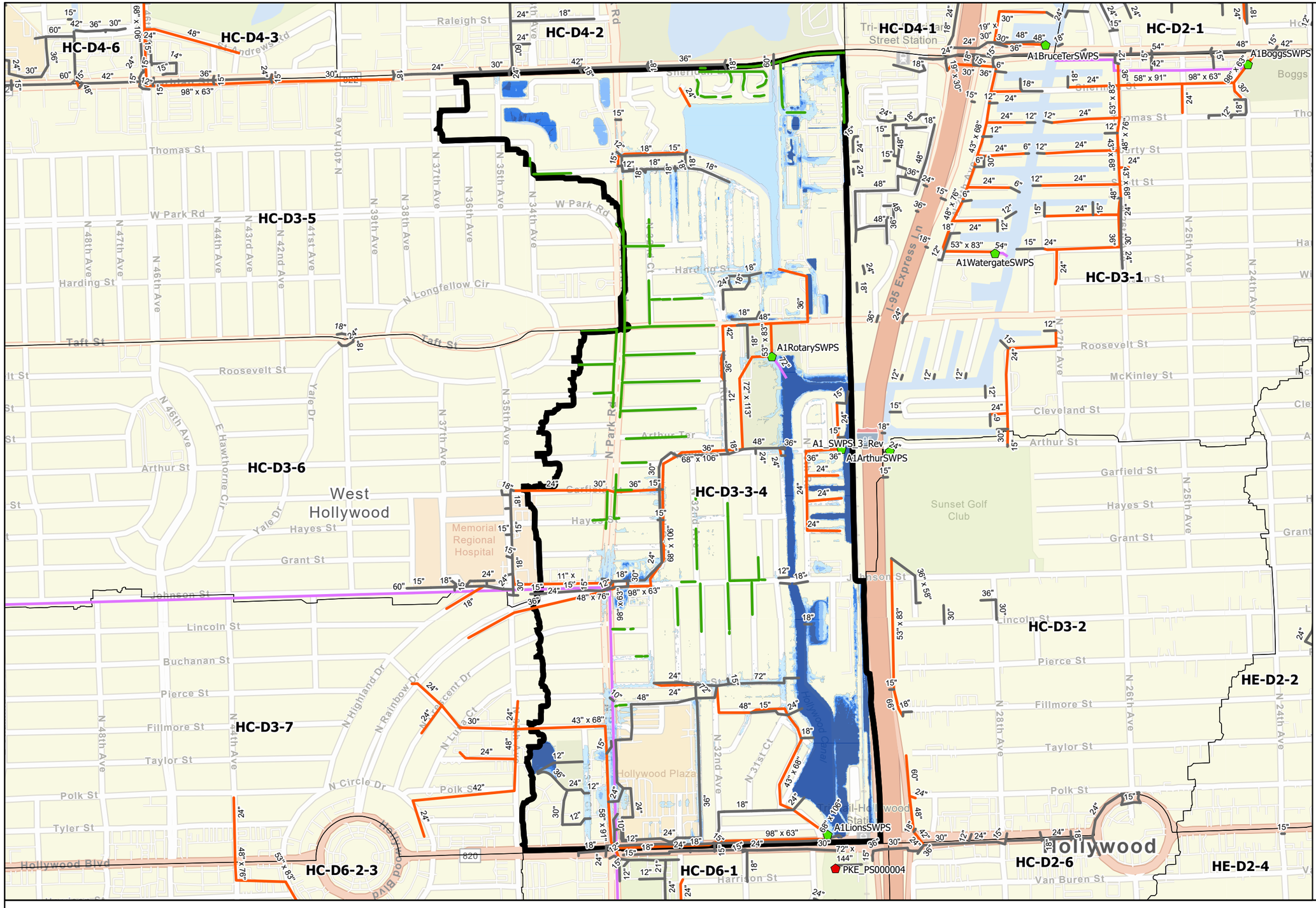


Legend

- 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.

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

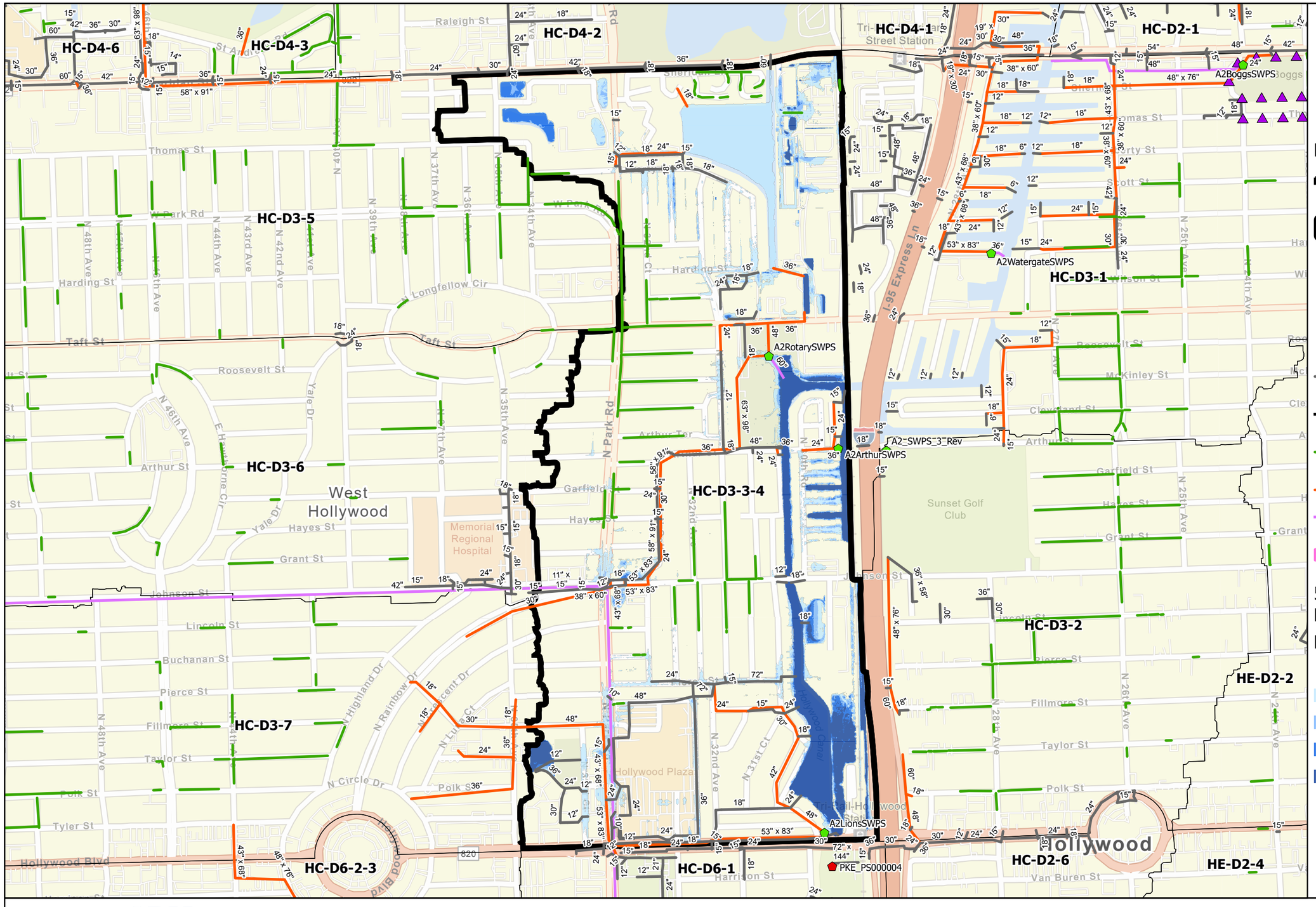
City of Hollywood Stormwater Master Plan

HC-D3-3-4_ALT1-10

2/28/2023

0 500 1,000 2,000 Feet

1:12,000



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 Parkeast North

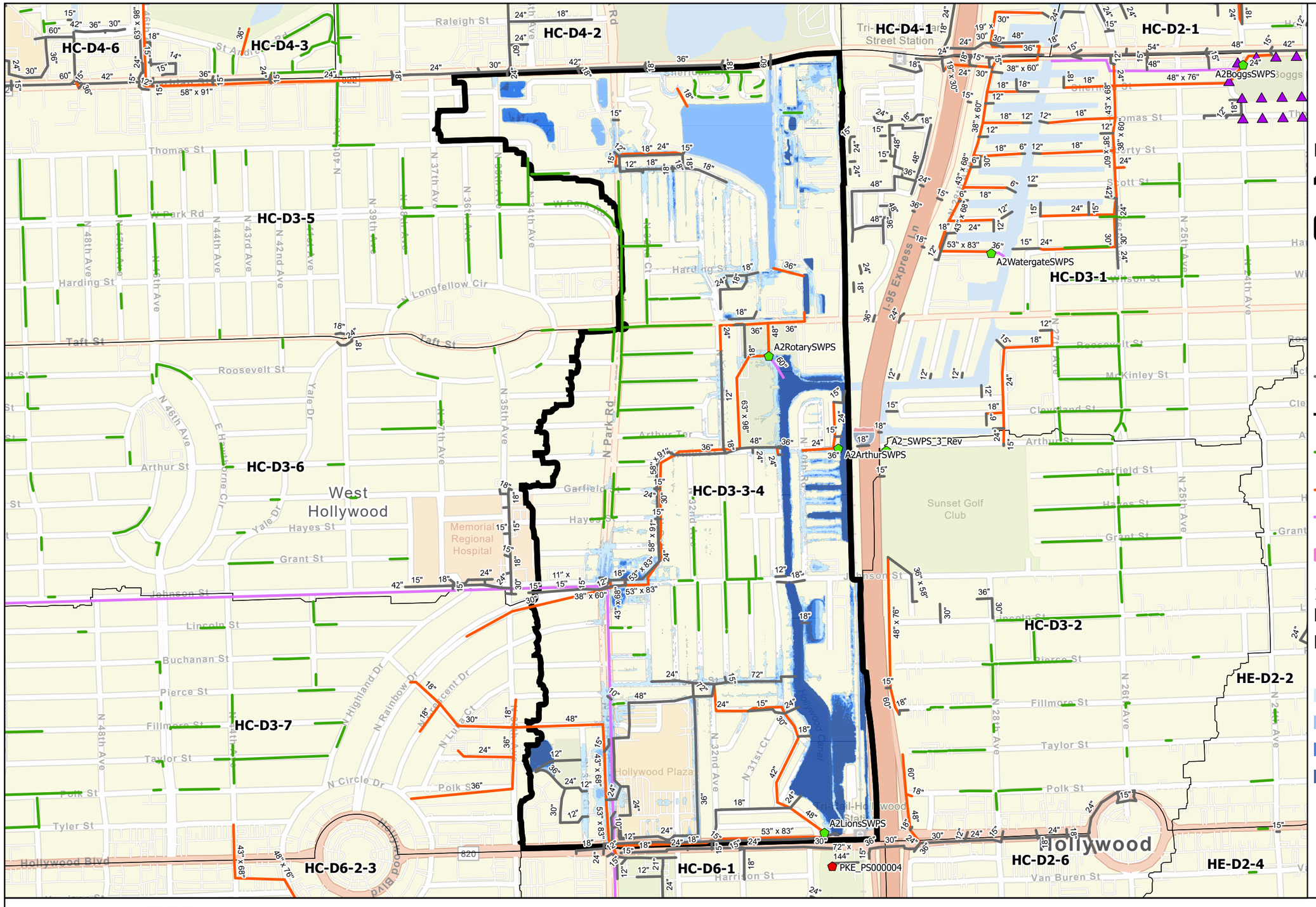
0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan

HC-D3-3-4_ALT2-5

2/28/2023



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 Parkeast North

0 500 1,000 2,000 Feet

1:12,000

City of Hollywood Stormwater Master Plan

HC-D3-3-4_ALT2-10

2/28/2023

		CONCEPTUAL CAPITAL COST ESTIMATE						ParkEast North	
								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	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	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	2	$ 9,800,000
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									$ 12,774,500
EXFILTRATION WITH GRAVITY MAINS								ParkEast North	
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	5,500	$ 264,000
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	625	$ 32,500
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	2,755	$ 220,400
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	535	$ 61,525
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	1,595	$ 199,375
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	1,810	$ 669,700
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	350	$ 151,200
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	470	$ 150,400
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	2,965	$ 1,215,650
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	1,850	$ 851,000
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	1,420	$ 809,400
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	18,497	$ 4,624,250
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	321	$ 9,623,000
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		$ 18,872,400
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	38,872	$ 10,495,440
								CONSTRUCTION COST SUBTOTAL	**$ 42,142,340**
GENERAL CONDITIONS								ParkEast North	
0061		Mobilization				LS	**4%**	$ 42,142,340	$ 1,685,694
0062		Insurance and General Conditions				LS	**2%**	$ 42,142,340	$ 842,847
0063		Permits/Fees				LS	**2%**	$ 42,142,340	$ 842,847
0064		Maintenance of Traffic				LS	**3%**	$ 42,142,340	$ 1,264,270
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 42,142,340	$ 6,321,351
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 42,142,340	$ 1,685,694
0067		OCI Management Cost				LS	**15%**	$ 42,142,340	$ 6,321,351
0068		Project Contingency Costs				LS	**30%**	$ 42,142,340	$ 12,642,702
		Land acquisition							
NS SUBTOTAL									$ 31,606,755
TOTAL									**$ 73,749,095**

		CONCEPTUAL CAPITAL COST ESTIMATE						ParkEast North	
								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	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	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	2	$ 7,000,000
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									$ 9,974,500
EXFILTRATION WITH GRAVITY MAINS								ParkEast North	
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	440	$ 19,800
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	3,065	$ 147,120
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	730	$ 37,960
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	1,570	$ 125,600
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	870	$ 100,050
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	790	$ 98,750
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	580	$ 214,600
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	3,455	$ 1,492,560
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	1,230	$ 393,600
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	1,940	$ 795,400
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	16,409	$ 4,102,250
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	260	$ 1,949,938
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	0	$ -
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
	GRAVITY MAIN SUBTOTAL								$ 9,477,628
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	31,579	$ 8,526,330
							CONSTRUCTION COST SUBTOTAL		**$ 27,978,458**
GENERAL CONDITIONS								ParkEast North	
0061		Mobilization				LS	**4%**	$ 27,978,458	$ 1,119,138
0062		Insurance and General Conditions				LS	**2%**	$ 27,978,458	$ 559,569
0063		Permits/Fees				LS	**2%**	$ 27,978,458	$ 559,569
0064		Maintenance of Traffic				LS	**3%**	$ 27,978,458	$ 839,354
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 27,978,458	$ 4,196,769
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 27,978,458	$ 1,119,138
0067		OCI Management Cost				LS	**15%**	$ 27,978,458	$ 4,196,769
0068		Project Contingency Costs				LS	**30%**	$ 27,978,458	$ 8,393,537
NS SUBTOTAL									$ 20,983,843
TOTAL									**$ 48,962,301**

- **Table HC-D3-3_4_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.12 CIP Area HC-D6-1 (Parkeast South)

Root Causes of Flooding

This CIP area is characterized residential and Golf Course land use. Although there is not significant flooding in this basin, the CIP is extensive as the Orangebrook GC is an integral part of the City's PSMS. Several areas historically flow through the GC and use it as storage. There is also a City-operated weir and SWPS at the NE end of this basin forward pumping the C-10 canal.

Alternative 1

Proposed CIP:

- Stormwater detention storage improvements within Orangebrook GC (requires 19.5 ac-ft of additional detention swale volume). The unused areas between the fairways can be re-graded and connected adding culverts or bridges at cart paths as necessary to create a continuous shallow storage flow path through the GC to create the necessary volume.
- New BFPs in system outfalls from the areas conveying stormwater into the GC to prevent the tidal influence from proceeding further upstream.
- Raise the seawalls/grass berms for all waterfront properties along the Orangebrook golf course ditch (properties on Calle Largo Dr) from Entrada St in the west, east to Hollywood Blvd. (Note: the western end of the GC stormwater conveyance ditch at the parking lot is receiving additional piping and headwall improvements (see Section 3.2.2.10 CIP Area HC-D6-2 / HC-D6-3 Hillcrest / Hollywood Hills South).
- Create a new berm at EL 7 NAVD along the along the perimeter of the GC (west along Park Rd, and east along the FDOT ditch in a few low areas, south along Pembroke Rd).
- Existing SWPS SW04 improvements – located on the canal west of I-95 south of Hollywood Blvd remains at its existing capacity (81 cfs), raise the existing fixed weir overflow in the canal at the station from the current EL 2.5 NAVD to EL 5 NAVD. Flood proofing and resiliency hardening of the pump control building and exposed electronic equipment.
- New gravity collection systems and inlets in neighborhoods.
- New 9,470 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-23 post-2

Summary of Offsite Issues Affecting CIP Area:

1. Exfiltration systems are recommended to be installed by the property owner (4,300 l.f.) at the "enV Apartment Homes" community at 730 Park Rd as this area appears to currently sheet flow downhill off the private development at approximately 16 cfs in the 10-year storm and floods into the City' R/O/W of Park Rd.

Alternative 2

Proposed CIP:

- Raise the seawalls/grass berms for all waterfront properties along the Orangebrook golf course ditch (properties on Calle Largo Dr) from Entrada St in the west, east to Hollywood Blvd. and create a new berm at EL 7 NAVD along the along the perimeter of Orangebrook GC. (Note: the western end of the GC stormwater conveyance ditch at the parking lot is receiving additional piping and headwall improvements (see Section 3.2.2.10 CIP Area HC-D6-2 / HC-D6-3 Hillcrest / Hollywood Hills South).
- Create a new berm at EL 7 NAVD along the along the perimeter of the GC (west along Park Rd, and east along the FDOT ditch in a few low areas, south along Pembroke Rd).
- New BFPs in system outfalls from other areas piping into GC.
- Existing SWPS SW04 improvements – located on the canal west of I-95 south of Hollywood Blvd remains at its existing capacity (81 cfs), raise the existing fixed weir overflow in the canal at the station from the current EL 2.5 NAVD to EL 5 NAVD. Flood proofing and resiliency hardening of the pump control building and exposed electronic equipment
- New gravity collection systems and inlets in neighborhoods.
- New 2,329 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-23 post-23

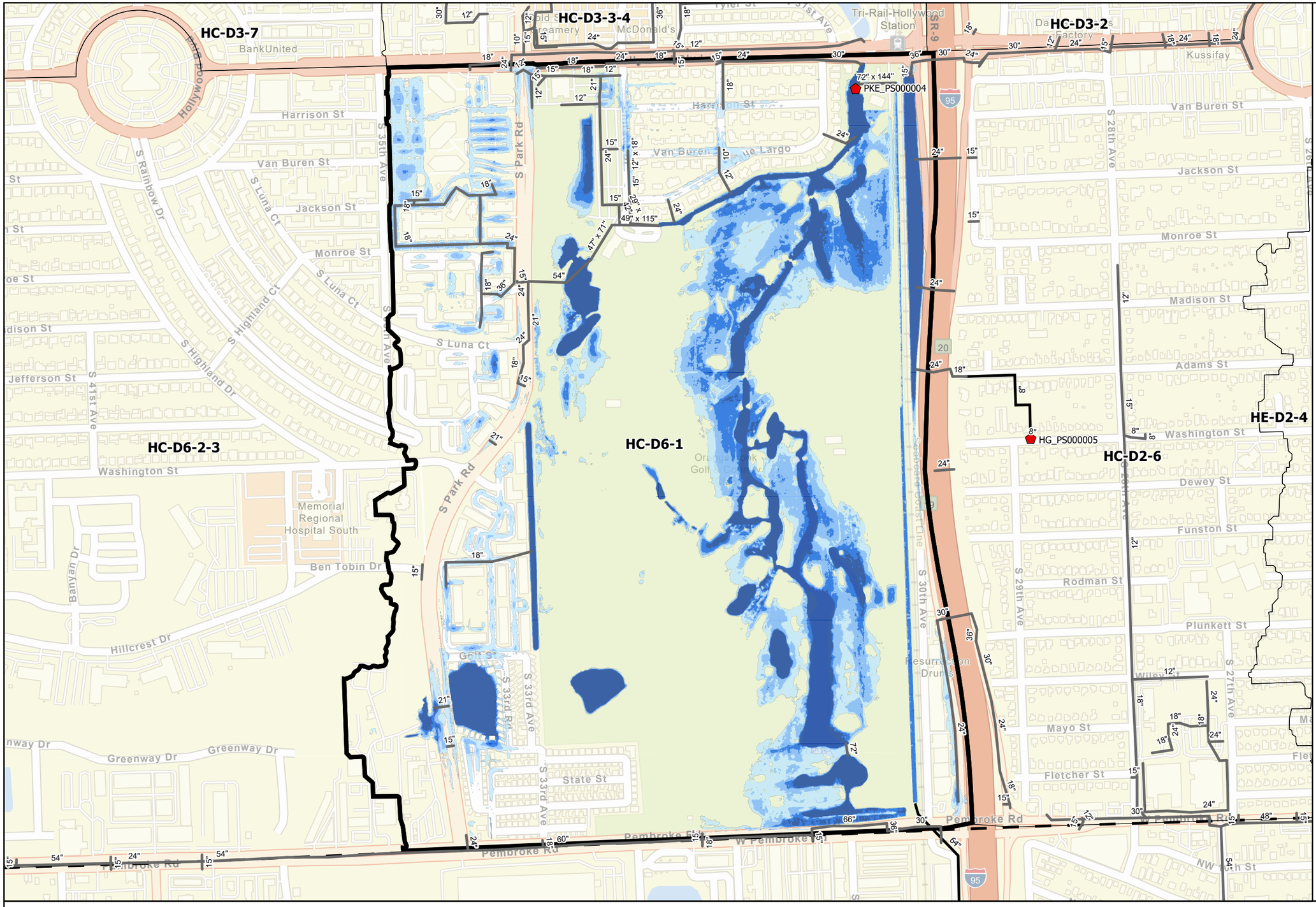
Summary of Offsite Issues Affecting CIP Area:

1. Exfiltration systems are recommended to be installed by the property owner (4,300 l.f.) at the "enV Apartment Homes" community at 730 Park Rd as this area appears to currently sheet flow downhill off the private development at approximately 16 cfs in the 10-year storm and floods into the City' R/O/W of Park Rd.

HC-D6-1 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-D6-1-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HC-D6-1-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HC-D6-1-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HC-D6-1-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**



Current Conditions Flooding in CIP Area
Parkeast South
5-year Design Storm

City of Hollywood Stormwater Master Plan
HC-D6-1_EC-5
2/28/2023

0 337.5 675 1,350 Feet
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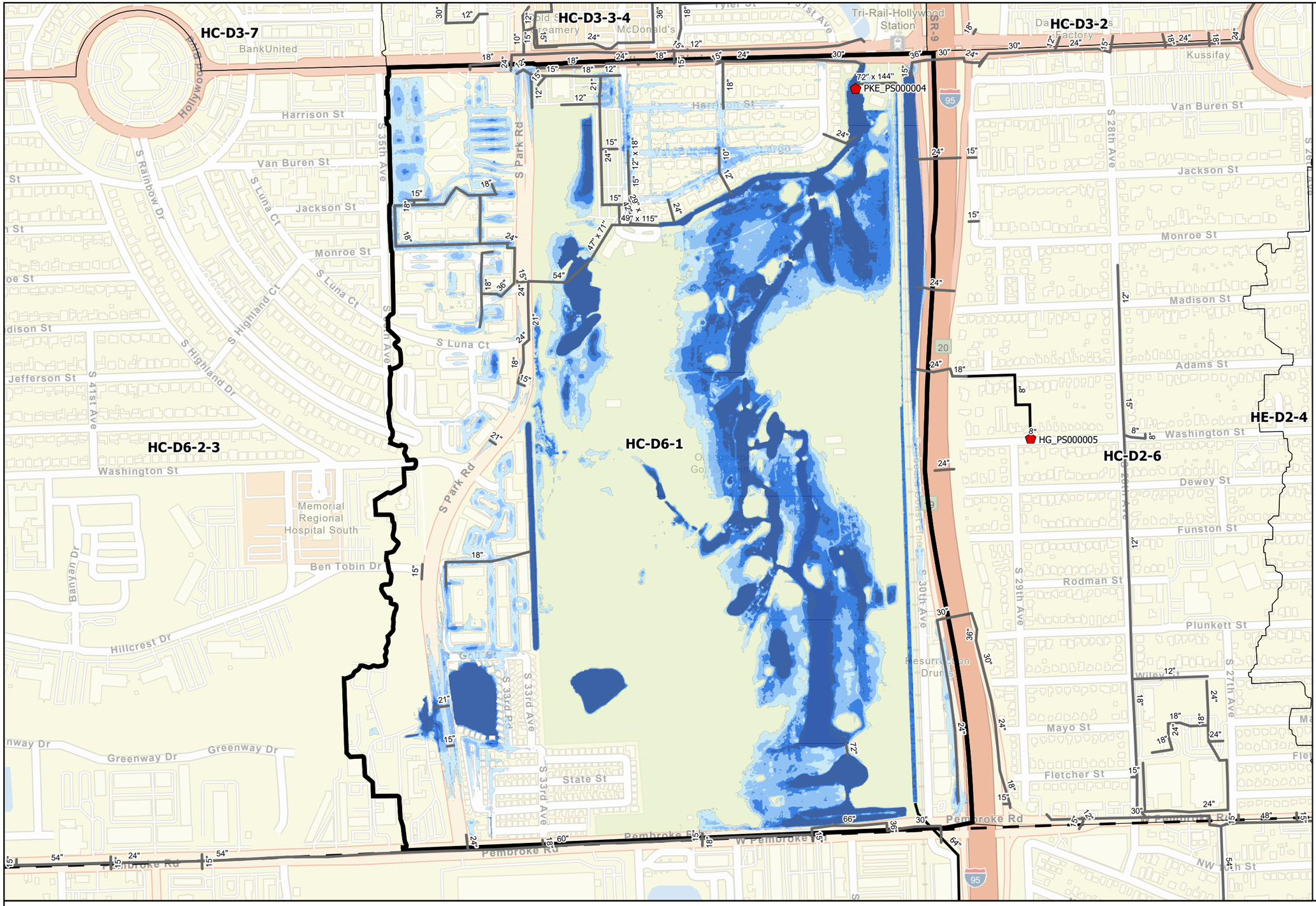

Current Conditions Flooding in CIP Area
Parkeast South
10-year Design Storm

City of Hollywood Stormwater Master Plan
HC-D6-1_EC-10
2/28/2023

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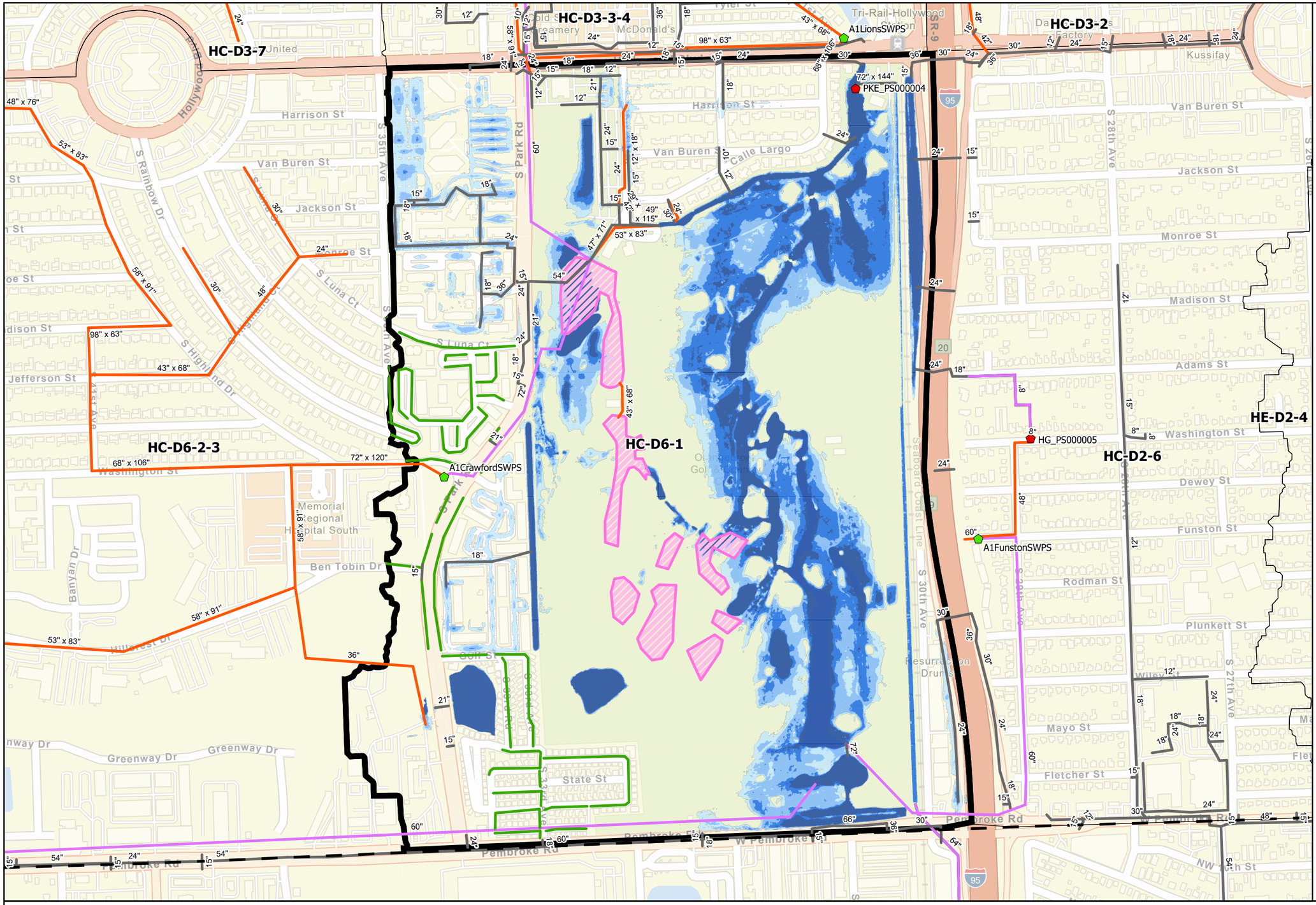

Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area
Parkeast South

City of Hollywood Stormwater Master Plan
HC-D6-1_ALT1-5
2/28/2023

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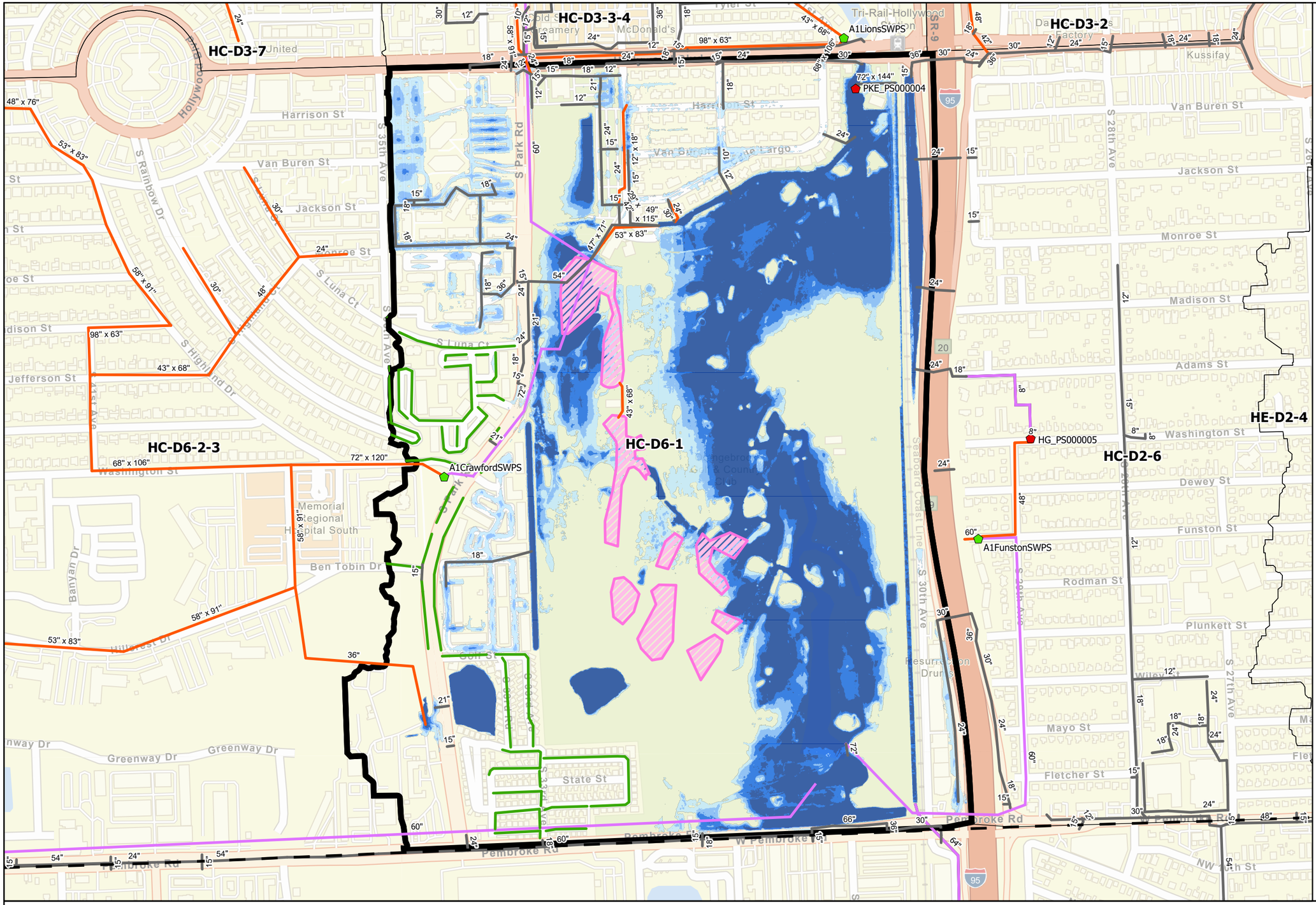

Predicted Flooding Reduction and Proposed ALT 1 CIP for 10-year Design Storm in CIP Area
Parkeast South

City of Hollywood Stormwater Master Plan
HC-D6-1_ALT1-10
2/28/2023

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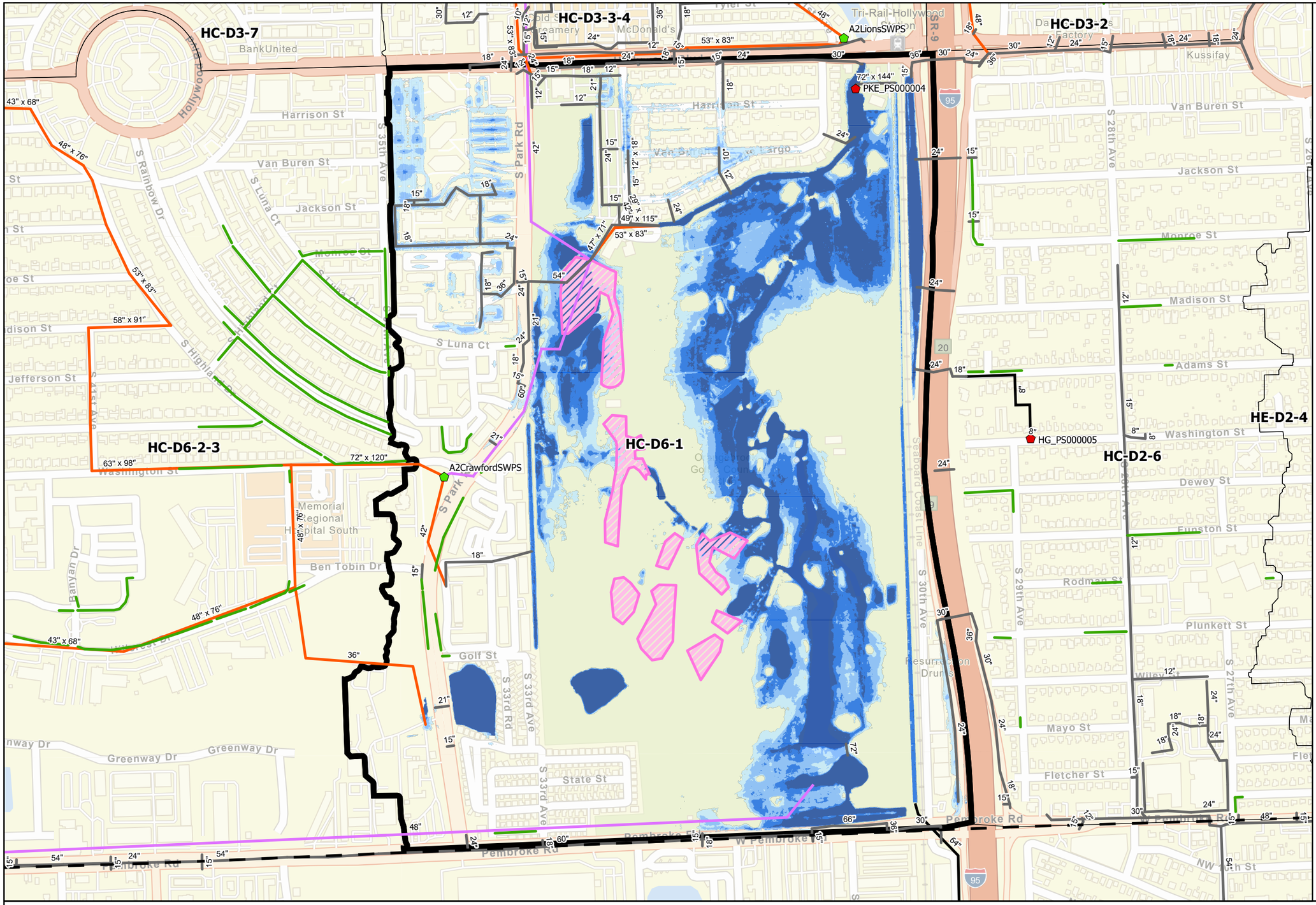

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area
Parkeast South

City of Hollywood Stormwater Master Plan
HC-D6-1_ALT2-5
2/28/2023

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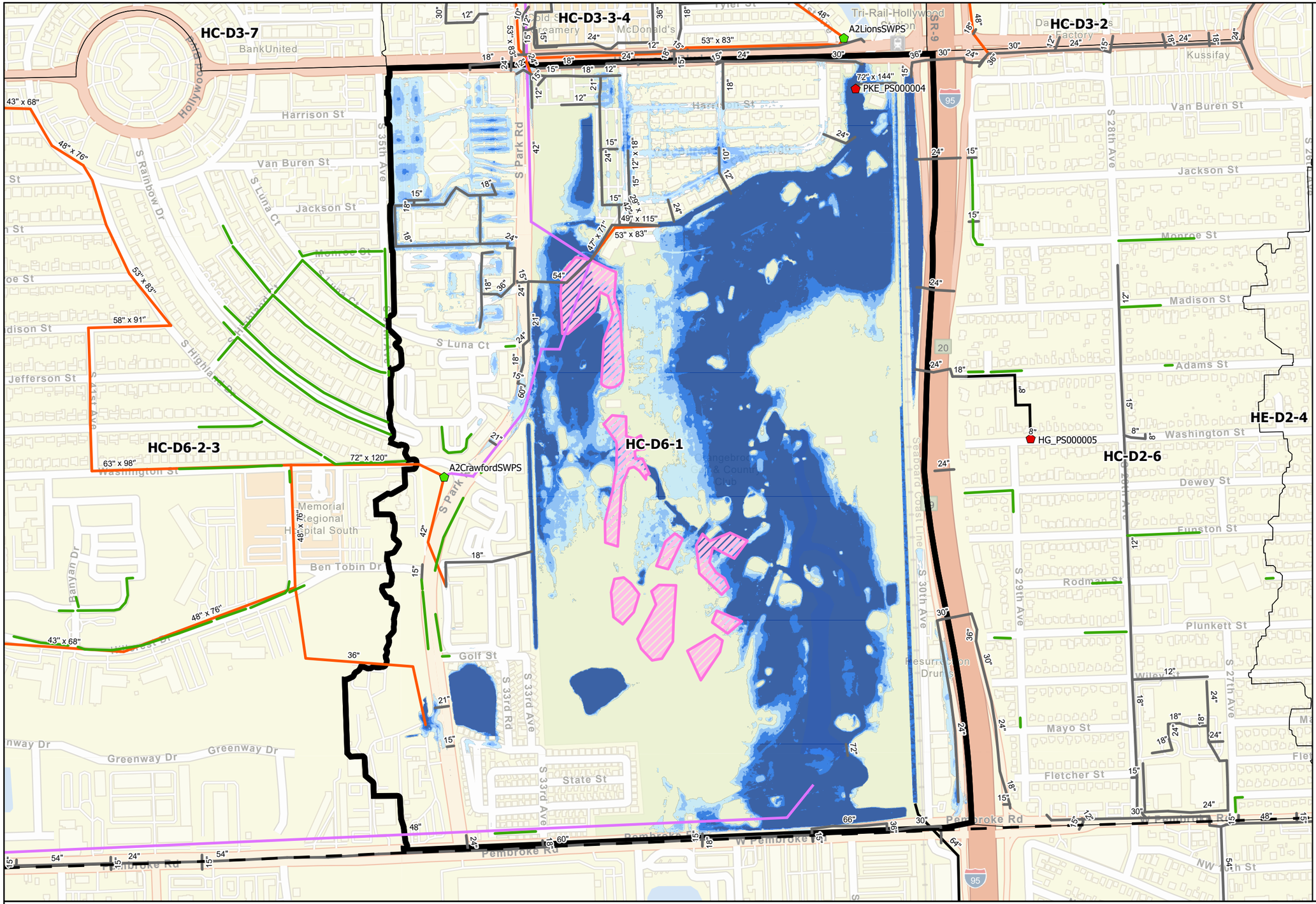

Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area
Parkeast South

City of Hollywood Stormwater Master Plan
HC-D6-1_ALT2-10
2/28/2023

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

		CONCEPTUAL CAPITAL COST ESTIMATE						ParkEast South	
								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								ParkEast South	
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	180	$ 9,360
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	250	$ 92,500
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	585	$ 252,720
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	10	$ 350,000
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	9,470	$ 2,367,500
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	1	$ 150,000
0055				Gravity Structures-Inlets		EA	$ 30,000.00	93	$ 2,800,000
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		$ 6,126,400
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	11,210	$ 3,026,700
								CONSTRUCTION COST SUBTOTAL	**$ 9,153,100**
GENERAL CONDITIONS								ParkEast South	
0061		Mobilization				LS	**4%**	$ 9,153,100	$ 366,124
0062		Insurance and General Conditions				LS	**2%**	$ 9,153,100	$ 183,062
0063		Permits/Fees				LS	**2%**	$ 9,153,100	$ 183,062
0064		Maintenance of Traffic				LS	**3%**	$ 9,153,100	$ 274,593
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 9,153,100	$ 1,372,965
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 9,153,100	$ 366,124
0067		OCI Management Cost				LS	**15%**	$ 9,153,100	$ 1,372,965
0068		Project Contingency Costs				LS	**30%**	$ 9,153,100	$ 2,745,930
		Land acquisition							
NS SUBTOTAL									$ 6,864,825
TOTAL									**$ 16,017,925**

		CONCEPTUAL CAPITAL COST ESTIMATE						ParkEast South	
								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								ParkEast South	
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	585	$ 252,720
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	10	$ 350,000
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	2,329	$ 582,250
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	1	$ 150,000
0056				Gravity Structures-Inlets		EA	$ 7,500.00	24	$ 182,125
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								$ 1,587,095
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	2,924	$ 789,480
							CONSTRUCTION COST SUBTOTAL		$ 2,376,575
GENERAL CONDITIONS								ParkEast South	
0061		Mobilization				LS	4%	$ 2,376,575	$ 95,063
0062		Insurance and General Conditions				LS	2%	$ 2,376,575	$ 47,532
0063		Permits/Fees				LS	2%	$ 2,376,575	$ 47,532
0064		Maintenance of Traffic				LS	3%	$ 2,376,575	$ 71,297
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 2,376,575	$ 356,486
0066		Construction Engineering Inspection Costs				LS	4%	$ 2,376,575	$ 95,063
0067		OCI Management Cost				LS	15%	$ 2,376,575	$ 356,486
0068		Project Contingency Costs				LS	30%	$ 2,376,575	$ 712,973
NS SUBTOTAL									$ 1,782,431
TOTAL									$ 4,159,006

- **Figure HC-D6-1-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HC-D6-1-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HC-D6-1_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HC-D6-1_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.2.13 CIP Area HC-D2-6 (Highland Gardens)

Root Causes of Flooding

This CIP area is characterized residential and commercial land use. Pockets of low areas collect runoff and flood as water sheet flows from surrounding higher areas and trapped by I-95 to the west and there is no positive system serving the area. There is a City SWPS that is severely undersized and can be abandoned.

Alternative 1

Proposed CIP:

- New Funston SWPS Type I at total capacity of 100 cfs pumping into the new improved storage in the Orangebrook GC (see Section 3.2.2.12 CIP Area HC-D6-1 - Parkeast South) , located underground in the City R/O/W at the cul-de-sac at I-95 via 3,300 l.f. of 60-inch FM.
- New gravity collection systems and inlets in neighborhoods to the new SWPS.
- New 11,790 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-118, post-5

Summary of Offsite Issues Affecting CIP Area:

1. The existing, historic I-95 overflows out of the FDOT drainage ditch into the neighborhood experienced at the Monroe, Madison, and Adams Street endings is captured by this new system, approximately 40 cfs in the 10 yr.

Alternative 2

Proposed CIP:

- New 3,620 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-118 post-40

Summary of Offsite Issues Affecting CIP Area:

1. None.

HC-D3-3-4
HC-D3-2
HE-D2-2
HE-D2-3
HE-D2-5
HE-D2-4
HC-D2-6
HC-D6-1
Orangebrook Golf & Country Club
PKE_PS000004
HG_PS000005
Tri-Rail-Hollywood Station
Dandee Donuts Factory
Kussifay
Old Stone Creamery
McDonald's
T-Mobile
Hollywood Digital Blueprint
Resurrection Drums
Nana's Sapibon Creole Bakery
Union Printing
42" Signs
Polk St
Tyler St
Hollywood Blvd
Van Buren St
Harrison St
Calle Largo
Jackson St
Monroe St
Madison St
Adams St
Washington St
Dewey St
Funston St
Rodman St
Plunkett St
Wiley Ct
Wiley St
Mayo St
Fletcher Ct
Fletcher St
Pembroke Rd
W Pembroke Rd
State St
S Park Rd
S 28th Ave
S 24th Ave
S 26th Ave
S 29th Ave
S 30th Ave
S 27th Ave
S 24th Ter
S 24th Ct
S 23rd Ave
S 22nd Ave
S Dixie Hwy
S 31st Ave
S 33rd Ave
S 33rd Rd
NW 4th Ave
SR-9
95

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
Highland Gardens
5-year Design Storm

City of Hollywood Stormwater Master Plan
HC-D2-6_EC-5
2/28/2023

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

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