HE-D1-6
HE-D1-5
HE-D1-4
HE-D1-3
HE-D1-2
HE-D1-1
HL_PS000001
HL_PS000002
HL_PS000007
HL_PS000008
HL_PS000009
Van_Buren_WW
Bouganvilla_PSWW
South Lake
Desoto Waterway
Harbor Island Dr
Joseph Scavo Park
Diplomat Country Club
Diplomat Mall
Diplomat Pkwy
Hollywood Blvd
Tyler St
Van Buren St
Monroe St
Madison St
Jefferson St
Adams St
Washington St
Dewey St
Funston St
Redman St
Plunkett St
Wiley St
Mayo St
Fletcher St
Atlantic Shores Blvd
E Hallandale Beach Blvd
NE 8th St
NE 7th St
NE 6th St
NE 4th Ct
NE 4th St
NE 2nd St
S 17th Ave
S 16th Ave
S 15th Ave
S 14th Ave
NE 12th Ave
NE 14th Ave
NE 26th Ave
NE 27th Ave
Parkview Dr
S North Lake Dr
S South Lake Dr

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.

CDM Smith

CITY OF Hollywood FLORIDA

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

0 500 1,000 2,000 Feet

1:14,000

City of Hollywood Stormwater Master Plan

HE-D1-2_EC-5

2/28/2023

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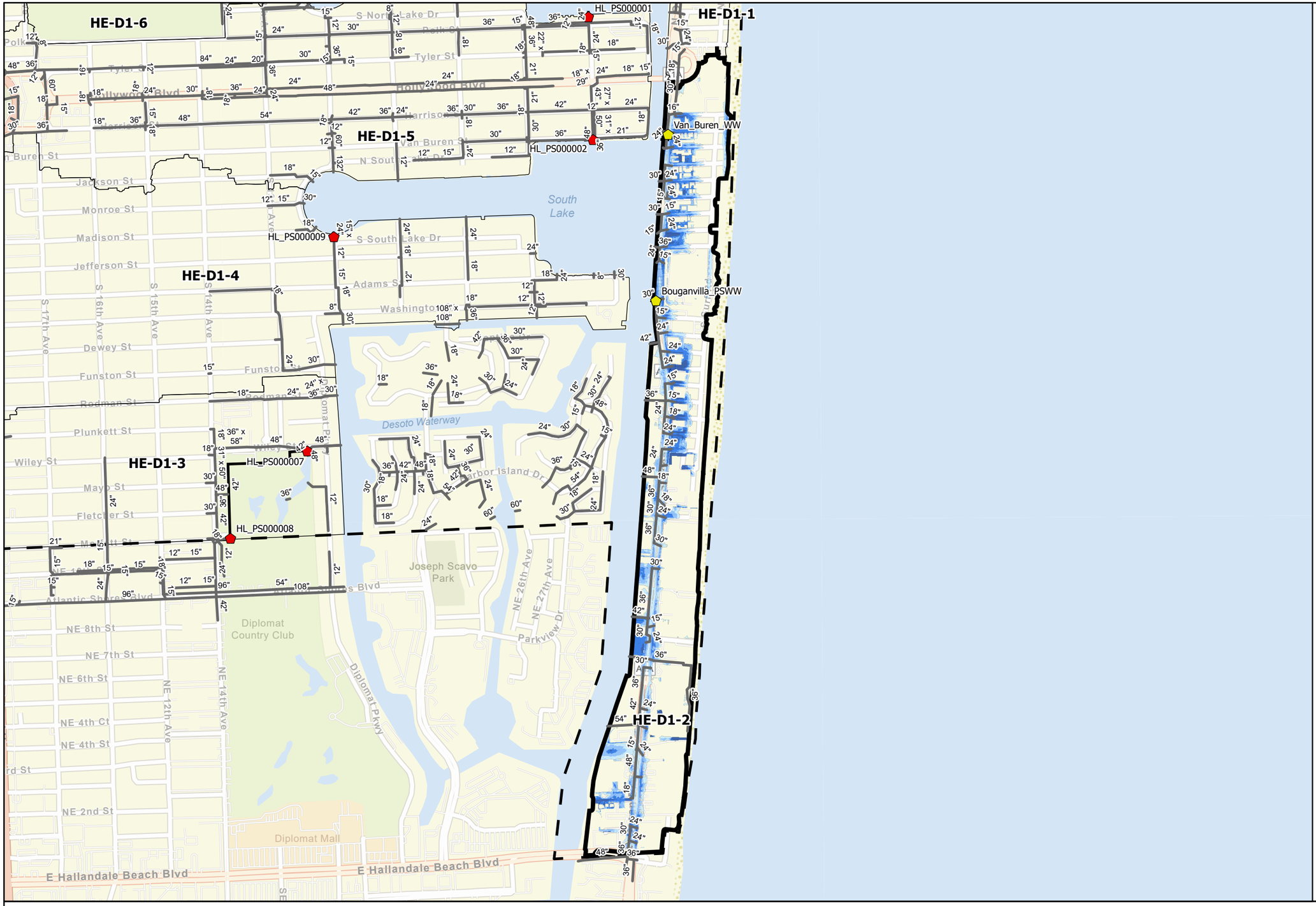

Current Conditions Flooding in CIP Area
South Central Beach
10-year Design Storm

City of Hollywood Stormwater Master Plan
HE-D1-2_EC-10
2/28/2023

0 500 1,000 2,000 Feet
1:14,000

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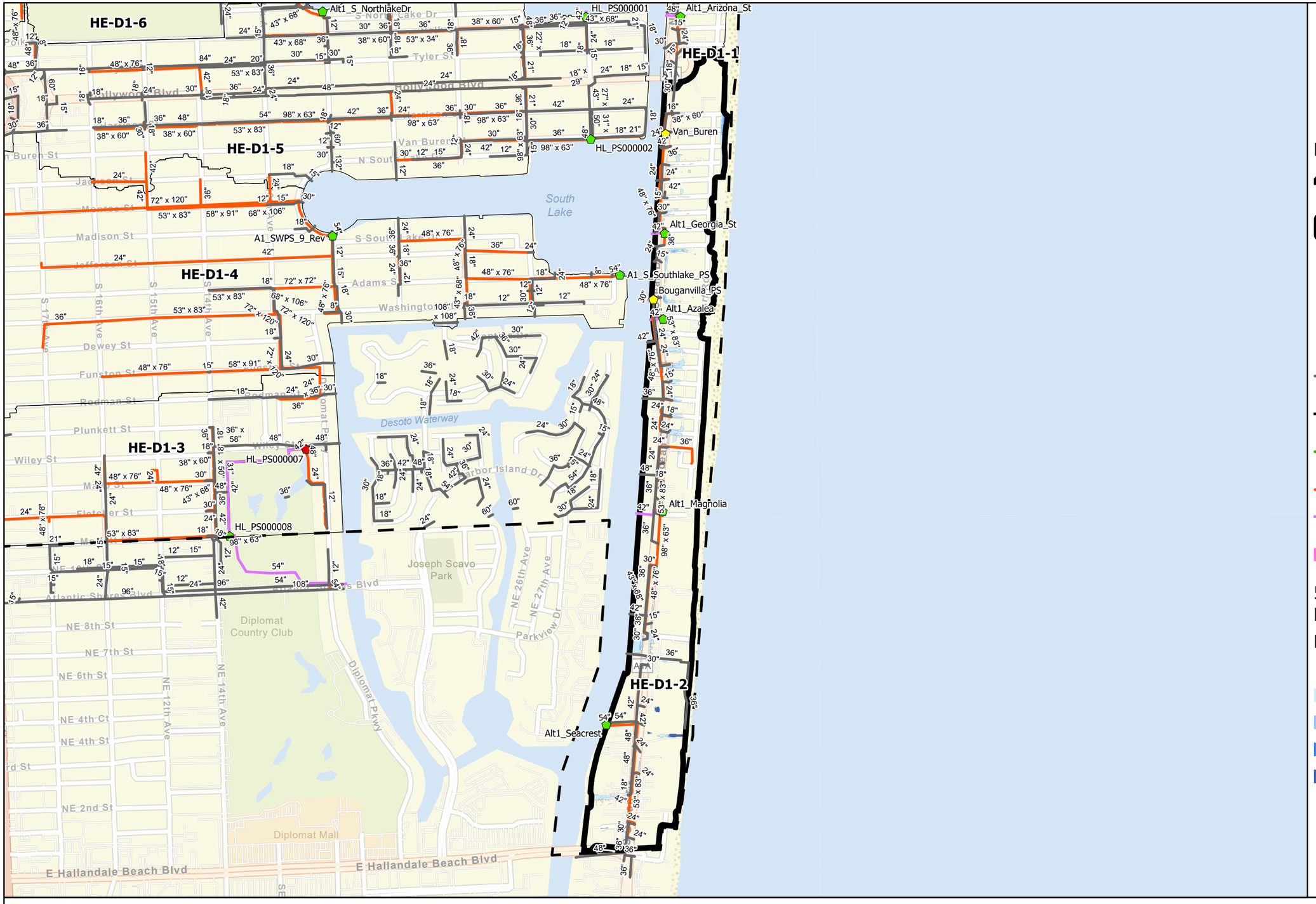

Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area
South Central Beach

City of Hollywood Stormwater Master Plan
HE-D1-2_ALT1-5
2/28/2023

0 500 1,000 2,000 Feet
1:14,000

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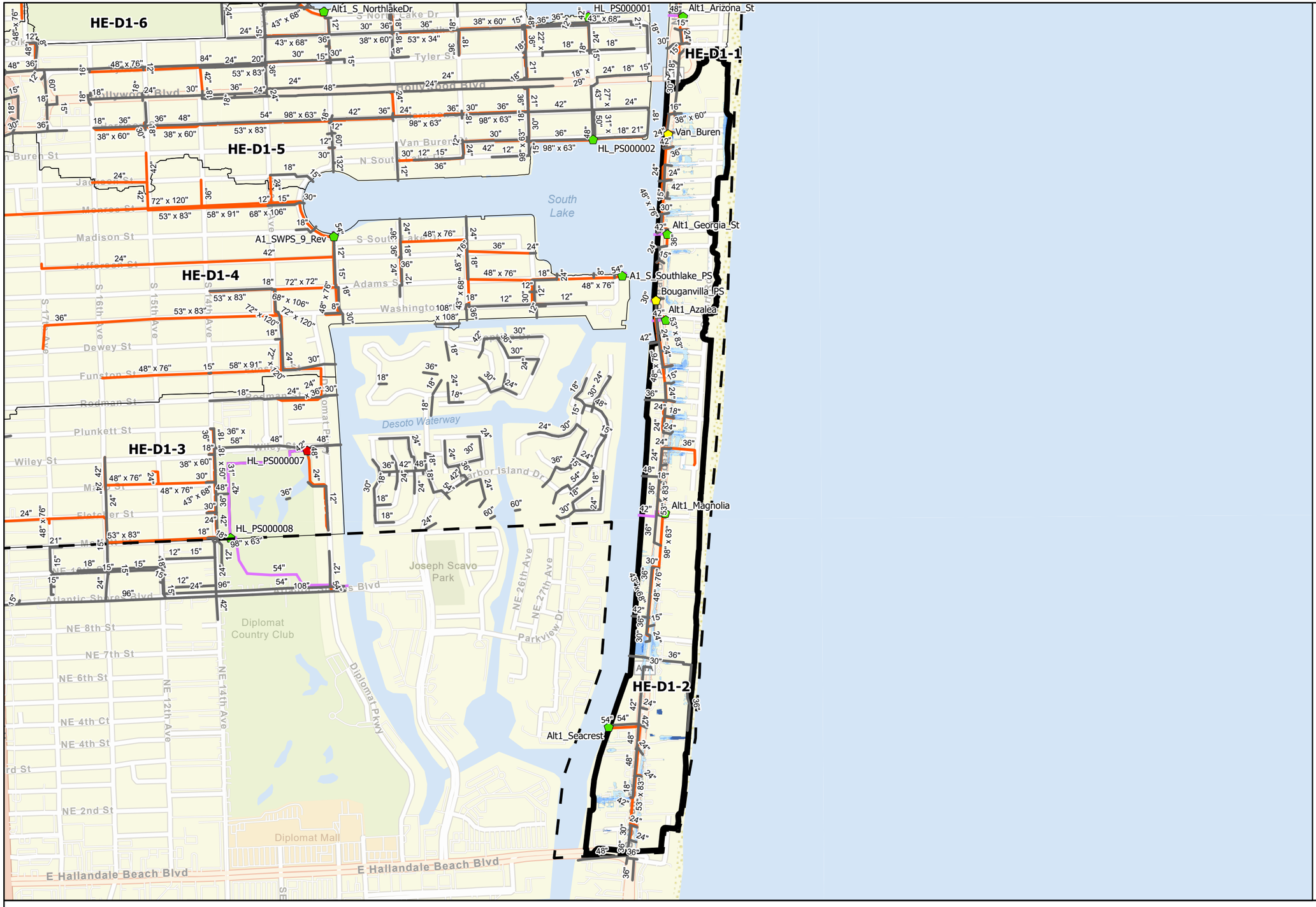


Legend

- 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 South Central Beach

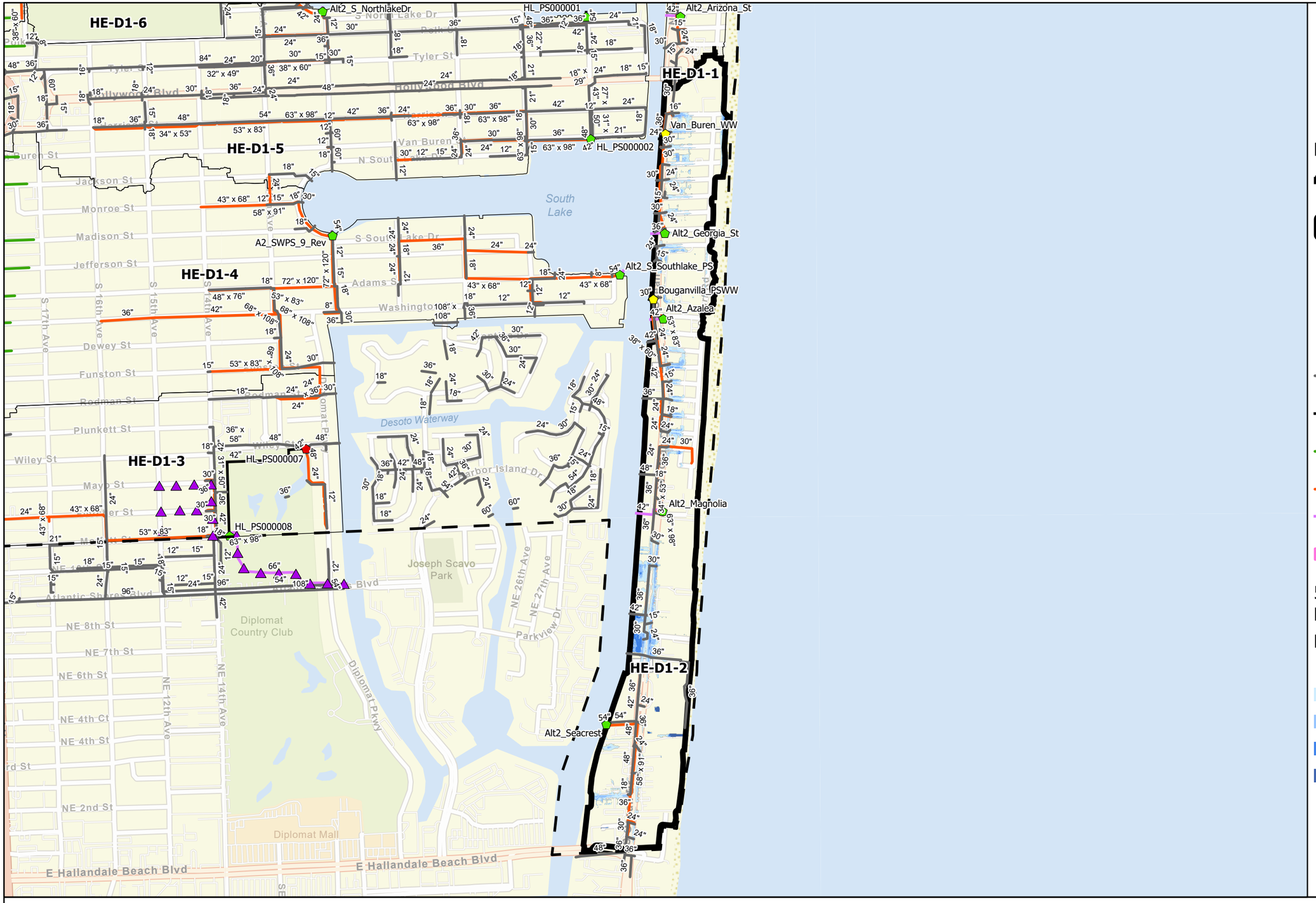
0 500 1,000 2,000 Feet

1:14,000

City of Hollywood Stormwater Master Plan

HE-D1-2_ALT1-10

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

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
South Central Beach

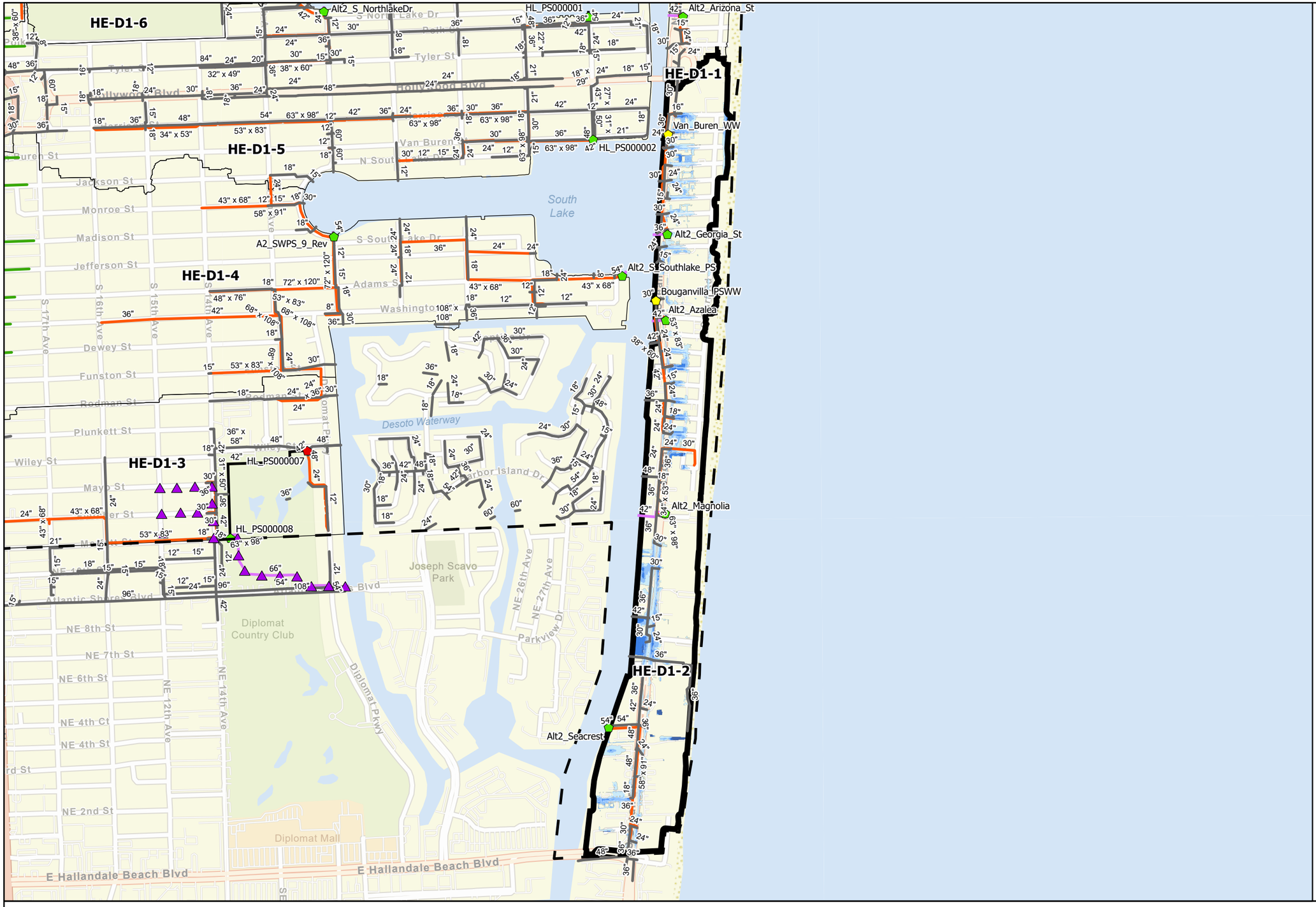
0 500 1,000 2,000 Feet

1:14,000

City of Hollywood Stormwater Master Plan

HE-D1-2_ALT2-5

2/28/2023



CDM Smith

CITY OF Hollywood FLORIDA

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

0 500 1,000 2,000 Feet

1:14,000

City of Hollywood Stormwater Master Plan

HE-D1-2_ALT2-10

2/28/2023

		CONCEPTUAL CAPITAL COST ESTIMATE					South Central Beach	
							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	1,440	$ 483,840
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	3	$ 10,500,000
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	$ -
AIN SUBTOTAL								$ 13,383,840
EXFILTRATION WITH GRAVITY MAINS							South Central Beach	
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	439	$ 21,091
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	235	$ 12,199
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	801	$ 64,056
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	144	$ 16,595
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	20	$ 2,500
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	201	$ 45,135
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	688	$ 161,610
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	1,189	$ 440,041
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	1,945	$ 777,920
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	2,161	$ 933,466
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	197	$ 62,944
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	1,213	$ 497,207
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	53	$ 24,288
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	84	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	0	$ -
0056	50			Weir Box CS		EA	$ 7,500.00	0	$ -
0057	53			CS-22 Remod		EA	$ 200,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0055				Gravity Structures-Inlets		EA	$ 30,000.00	80	$ 2,407,500
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		$ 5,466,551
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	10,725	$ 2,895,750
								CONSTRUCTION COST SUBTOTAL	**$ 21,746,141**
GENERAL CONDITIONS								South Central Beach	
0061		Mobilization				LS	**4%**	$ 21,746,141	$ 869,846
0062		Insurance and General Conditions				LS	**2%**	$ 21,746,141	$ 434,923
0063		Permits/Fees				LS	**2%**	$ 21,746,141	$ 434,923
0064		Maintenance of Traffic				LS	**3%**	$ 21,746,141	$ 652,384
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 21,746,141	$ 3,261,921
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 21,746,141	$ 869,846
0067		OCI Management Cost				LS	**15%**	$ 21,746,141	$ 3,261,921
0068		Project Contingency Costs				LS	**30%**	$ 21,746,141	$ 6,523,842
		Land acquisition							
NS SUBTOTAL									$ 16,309,606
TOTAL									**$ 38,055,747**

		CONCEPTUAL CAPITAL COST ESTIMATE						South Central Beach	
								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	300	$ 72,600
0003	15	42		FM- Force Main Collector	Circular	LF	$ 336.00	1,140	$ 383,040
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	4	$ 9,600,000
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									$ 10,055,640
EXFILTRATION WITH GRAVITY MAINS								South Central Beach	
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	416	$ 19,968
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	1,130	$ 58,760
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	658	$ 52,640
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	192	$ 22,080
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	397	$ 89,325
0038	35	38	60	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 235.00	702	$ 164,970
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	949	$ 351,130
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	203	$ 81,200
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	532	$ 229,824
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	1,295	$ 414,400
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	471	$ 193,110
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	0	$ -
0045	42	72	113	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 570.00	0	$ -
0046	43	82	128	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 650.00	0	$ -
0048	44	72	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	0	$ -
0049	46	72	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	0	$ -
0050	47	96	96	GM-Gravity Main Collector	Rectangle Closed	LF	$ 850.00	0	$ -
0051	48			GBP-Gravity Backflow Pipe <36"		Ea	$ 35,000.00	0	$ -
0052	49			GBP-Gravity Backflow Pipe >36"		Ea	$ 70,000.00	0	$ -
0053	5			GW-Gravity Wells		EA	$ 105,000.00	0	$ -
0054	4	48		ET-Exfiltration Trench		LF	$ 250.00	0	$ -
0055	50			Weir Box CS		EA	$ 30,000.00	0	$ -
0057	53			CS-22 Remod		EA	$ 525,000.00	0	$ -
0058	55			SW-04 Remod		EA	$ 150,000.00	0	$ -
0056				Gravity Structures-Inlets		EA	$ 7,500.00	61	$ 455,663
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								$ 2,133,070
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	8,385	$ 2,263,950
								CONSTRUCTION COST SUBTOTAL	$ 14,452,660
GENERAL CONDITIONS								South Central Beach	
0061		Mobilization				LS	4%	$ 14,452,660	$ 578,106
0062		Insurance and General Conditions				LS	2%	$ 14,452,660	$ 289,053
0063		Permits/Fees				LS	2%	$ 14,452,660	$ 289,053
0064		Maintenance of Traffic				LS	3%	$ 14,452,660	$ 433,580
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 14,452,660	$ 2,167,899
0066		Construction Engineering Inspection Costs				LS	4%	$ 14,452,660	$ 578,106
0067		OCI Management Cost				LS	15%	$ 14,452,660	$ 2,167,899
0068		Project Contingency Costs				LS	30%	$ 14,452,660	$ 4,335,798
NS SUBTOTAL									$ 10,839,495
TOTAL									$ 25,292,154

- **Figure HE-D1-2-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HE-D1-2-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HE-D1-2-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HE-D1-2-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HE-D1-2_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HE-D1-2_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.4.3 CIP Area HE-D1-3 (Hollywood Lakes South)

Root Causes of Flooding

This CIP area is characterized residential and golf course land use. There is higher ground to the west and south (Hallandale Beach) and low area elsewhere in the basin (road crowns are below 1 NAVD). The area is served by two undersized SWPS SW 07 and SW 08 and deep flooding occurs. Due to the low elevation, the gravity outfalls do not work at high tide and there is significant tidal inflow into the area.

Alternative 1

Proposed CIP:

- Upgraded or new SWPS SW08 site facility on Diplomat CG near S 14th Ave and Moffet St:
  - The existing SW08 pump station capacity is approximately 70 cfs pumping north into the SW07 wetwell at the NE corner of the GC (a flow restriction at 49 cfs) and is then re-pumped to the existing 48-inch gravity outfall to the west at the Desoto canal at Wiley Street. The outfall easement appears to have been abandoned by the City on the BCPA tax rolls with the pipe still underneath, the property owner has built within the easement, and no room now exists to increase the discharge pipe size to accommodate the future larger required flow piping, so this re-pumped restriction and SWPS will likely remain as existing. Pumped flows will go both north in the existing system in parallel with a new proposed SWPS at the site as described below. If the City wishes to pursue a new easement through the property at 1333 Diplomat Pkwy (there appears to be sufficient room on the south side of the property), the discharge pipe from SW08 can be increased and removed from the influent of SW07, and a new outfall to the canal created, while increasing the pump capacity at existing SW08 and adding the removed capacity from SW07.
  - SW07 will require prevention measures to avoid recirculative pumping back into SW08 through the interconnected system. This can be accomplished by plugging the existing 58” x 36” elliptical pipe on Wiley St.

- New Type IV SWPS at the existing SW08 site in an expanded easement with the GC at a total capacity of 475 cfs pumping south into approximately 43 (9 inline and 34 offline) IWs to remove 172 cfs (at approximately 4 cfs per well) , and excess flow will outfall into the Desoto canal to the ICW via twin 2,090 ft of 54-inch FM located in an easement along the Diplomat GC at the bridge at Atlantic Shores Blvd (smaller size FM if the wells can be installed). Note: This new outfall is in the City of Hallandale and will need to be coordinated as there is currently no access to the canal for an outfall pipe within the neighborhoods in Hollywood. If the existing SWPS and pipe to the north can be increased by obtaining a new easement as discussed above, the capacity of this new SWPS can be reduced.
- The new SWPS capacity may be lower depending on the existing SW08 potential for upgrade as discussed above. The two SWPSs 08 at the site can remain separate or be combined into one common facility in final design.
- At the Atlantic Shores Blvd bridge, the existing Hallandale gravity north outfall will be diverted to the south side of the street in 4.5' circular pipe with a required BFP to maintain the upstream gravity flow and the new FM will continue to the canal on the north side.
- The alternative route would be to create a new easement at the property north of Wiley Street for up to twin 54-inch FMs for the SW08 increased flow.

- New gravity collection systems and inlets in neighborhoods to the new SWPS.
- New BFPs to prevent recirculative pumping and block inflow into the neighborhood from the south in the system in the existing 24-inch pipe at Moffett near the SWPS and at Moffet and S 76th Ave.
- New 350 l.f. of exfiltration systems in neighborhoods.

<u>Summary of Locations Not Meeting ALT 1 LOS:</u>

1. Structures Flooded pre-36, post seawall-39, post-6
2. Moffett St roadway elevation will need to raise at N 14th St for approximately 400 l.f. to the west to a minimum EL 2 NAVD when the improvements are installed.

<u>Summary of Offsite Issues Affecting CIP Area:</u>

1. The City of Hallandale Beach contributes 157 acres or 42% of the 378 total acres tributary area to existing SWPS 08 (and to the new proposed Diplomat SWPS to meet LOS). The estimated flow into the City of Hollywood from the City of Hallandale Beach in the 10-year storm is approximately 200 cfs under existing conditions, and in the proposed condition, 270 cfs (approximately 50% of the flow). The ALT1 proposed CIP is predicted to lower flooding depth in the Hallandale Beach in the neighborhood of Moffett St and NE 14th Ave by three feet in the 10 yr storm (zero flooding over the crown of the road), and in the other contributing service area up to 5 inches in the 100 yr storm and the duration at the storm peak from 4 hours to less than1 hour. Note: The City of Hollywood will need an easement through

Hallandale Beach on Atlantic Shores Blvd for the outfall pipes as there is currently no access to the receiving canal in the City of Hollywood. This project is recommended to be a joint project between the two municipalities as there is an economy of scale and it benefits the LOS for both entities.

Alternative 2

Proposed CIP:

- Upgraded or new SWPS SW08 facility:
- The existing SW08 pump station capacity is approximately 70 cfs pumping north into the SW07 wetwell at the NE corner of the GC (a flow restriction at 49 cfs) and is then re-pumped to the existing 48-inch outfall to the west at the Desoto canal at Wiley Street. The outfall easement appears to have been abandoned by the City on the BCPA tax rolls with the pipe still underneath, the property owner has built within the easement, and no room now exists to increase the discharge pipe size to accommodate the future larger required flow piping, so this re-pumped restriction and SWPS will likely remain as existing. Pumped flows will go both north in the existing system in parallel with a new proposed SWPS at the site as described below. If the City wishes to pursue a new easement through the property at 1333 Diplomat Pkwy (there appears to be sufficient room on the south side of the property), the discharge pipe from SW08 can be increased and removed from the influent of SW07, and a new outfall to the canal created, while increasing the pump capacity at existing SW08 and adding capacity from SW07.
- SW07 will require prevention measures to avoid recirculative pumping back into SW08 through the interconnected system. This can be accomplished by plugging the existing 58" x 36" elliptical pipe on Wiley St.
- Expansion of the SW08 pump station (or new facility next to it) to a total of 293 cfs with an additional 220 cfs capacity pumping station Type III to pumping south into approximately 20 (9 inline and 11 offline) IWs to remove 80 cfs (at approximately 4 cfs per well) , and excess flow will outfall into the Desoto canal to the ICW via the canal to the ICW via twin 2,090 ft of 54-inch FM located in an easement along the Diplomat GC at the bridge at Atlantic Shores Blvd (smaller size FM if the wells can be installed). Note: This outfall is in the City of Hallandale and will need to be coordinated as there is no access to the canal for an outfall pipe within the neighborhoods in Hollywood.
- The new SWPS capacity may be lower depending on the existing SW08 potential for upgrade as discussed above. The two SWPSs 08 at the site can remain separate or be combined into one common facility in final design.
- At the Atlantic Shores Blvd bridge, the existing Hallandale gravity north outfall will be diverted to the south side of the street in 4.5' circular pipe with a required BFP to maintain the upstream gravity flow with a new BFP, and the new FM will continue to the canal on the north side.

  - The alternative route would be to create a new easement at the Wiley Street (or nearby property) for a parallel twin 54-inch FMs for the SW08 increased flow.

- New gravity collection systems and inlets in neighborhoods to the new SWPS
- New BFPs to prevent recirculative pumping and block inflow into the neighborhood from the south in the system in the existing 24-inch pipe at Moffett St near the SWPS and at Moffett St and S 76th Ave.
- New 350 l.f. of exfiltration systems in neighborhoods.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-36, post seawall-39, post-20
2. Moffett St roadway elevation will need to raise at N 14th St for approximately 400 l.f. to the west to a minimum EL 2 NAVD when the improvements are installed.

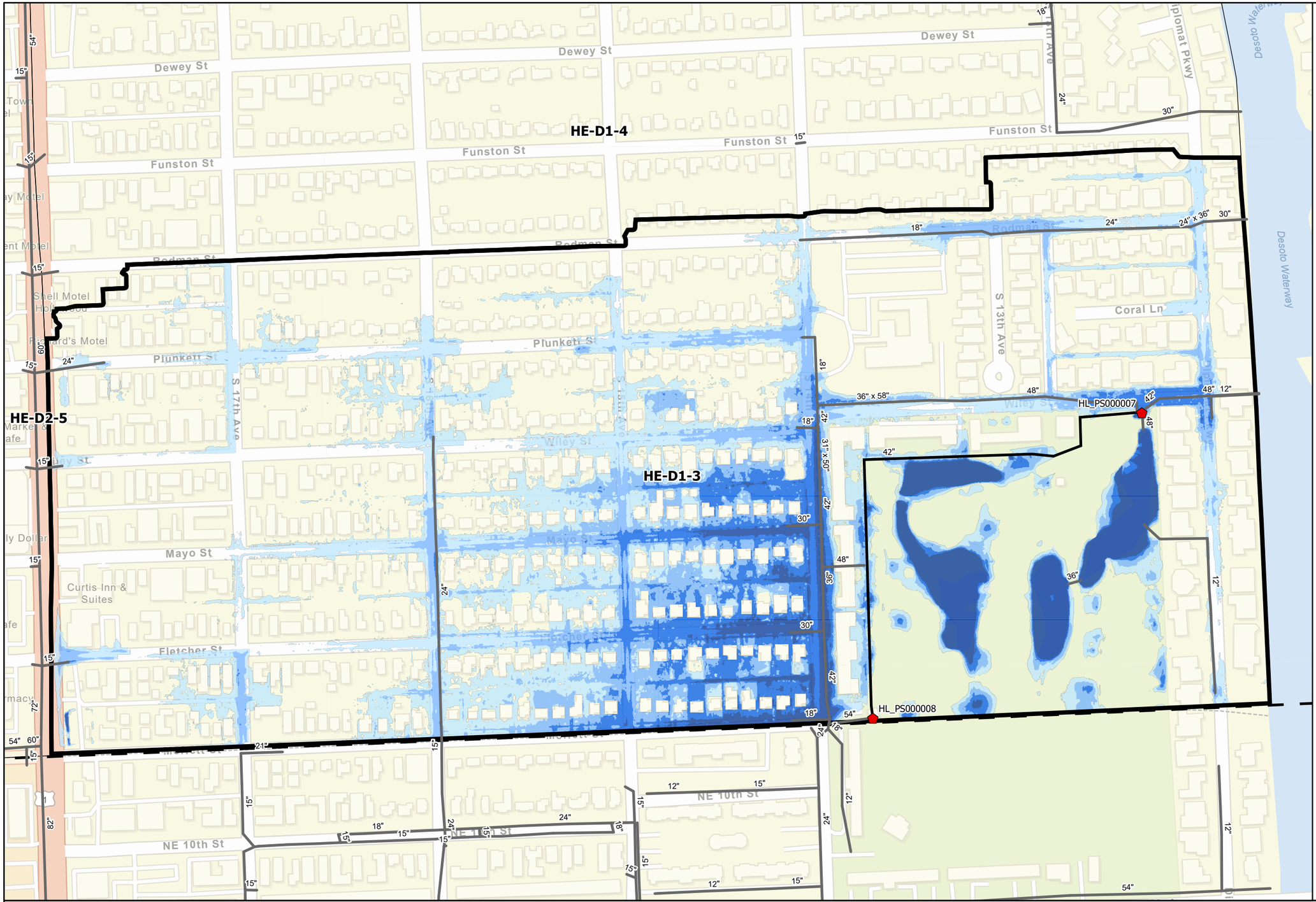
Summary of Offsite Issues Affecting CIP Area:

1. The City of Hallandale Beach contributes 157 acres or 42% of the 378 total acres tributary area to existing SWPS 08 (and to the new proposed Diplomat SWPS to meet LOS). The estimated flow into the City of Hollywood from the City of Hallandale Beach in the 10-year storm is approximately 200 cfs under existing conditions, and in the proposed condition, 270 cfs (approximately 50% of the flow). The ALT1 proposed CIP is predicted to lower flooding depth in the Hallandale Beach in the neighborhood of Moffett St and NE 14th Ave by three feet in the 10 yr storm (zero flooding over the crown of the road), and in the other contributing service area up to 5 inches in the 100 yr storm and the duration at the storm peak from 4 hours to less than1 hour. Note: The City of Hollywood will need an easement through Hallandale Beach on Atlantic Shores Blvd for the outfall pipes as there is currently no access to the receiving canal in the City of Hollywood. This project is recommended to be a joint project between the two municipalities as there is an economy of scale and it benefits the LOS for both entities.

HE-D1-3 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 HE-D1-3-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HE-D1-3-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HE-D1-3-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HE-D1-3-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**



Legend

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

5-Year 24-Hour Storm Flood

Feet

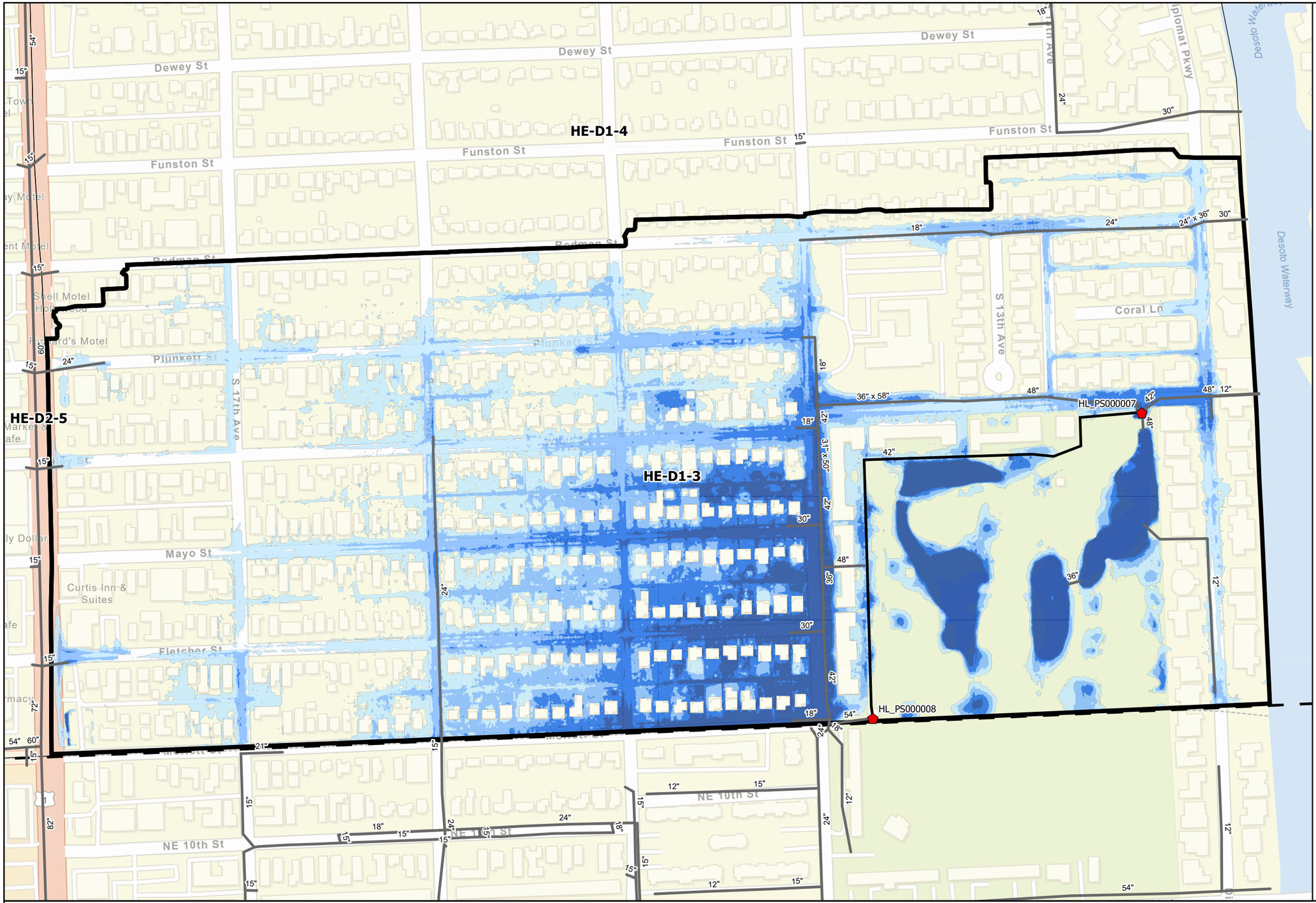
- <= 0 ft.
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5 ft.

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

0 170 340 680 Feet

1:4,000

City of Hollywood Stormwater Master Plan
HE-D1-3_EC-5
2/28/2023



Legend

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

10-Year 72-Hour Storm Flood

Feet

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

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

0 170 340 680 Feet

1:4,000

City of Hollywood Stormwater Master Plan
HE-D1-3_EC-10
2/28/2023

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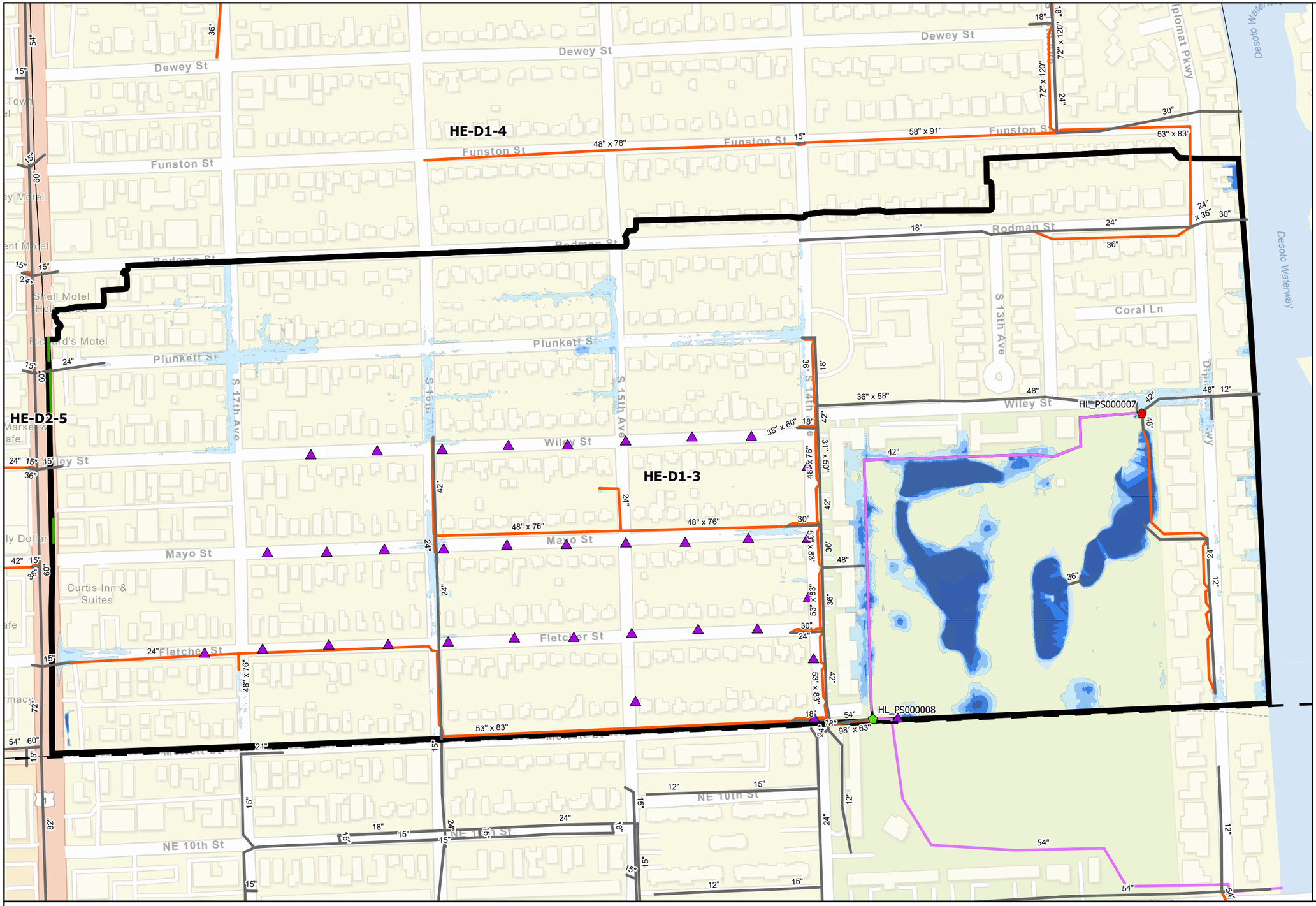

Predicted Flooding Reduction and Proposed ALT 1 CIP for 5-year Design Storm in CIP Area Hollywood Lakes South

City of Hollywood Stormwater Master Plan
HE-D1-3_ALT1-5
2/28/2023

0 170 340 680 Feet
1:4,000

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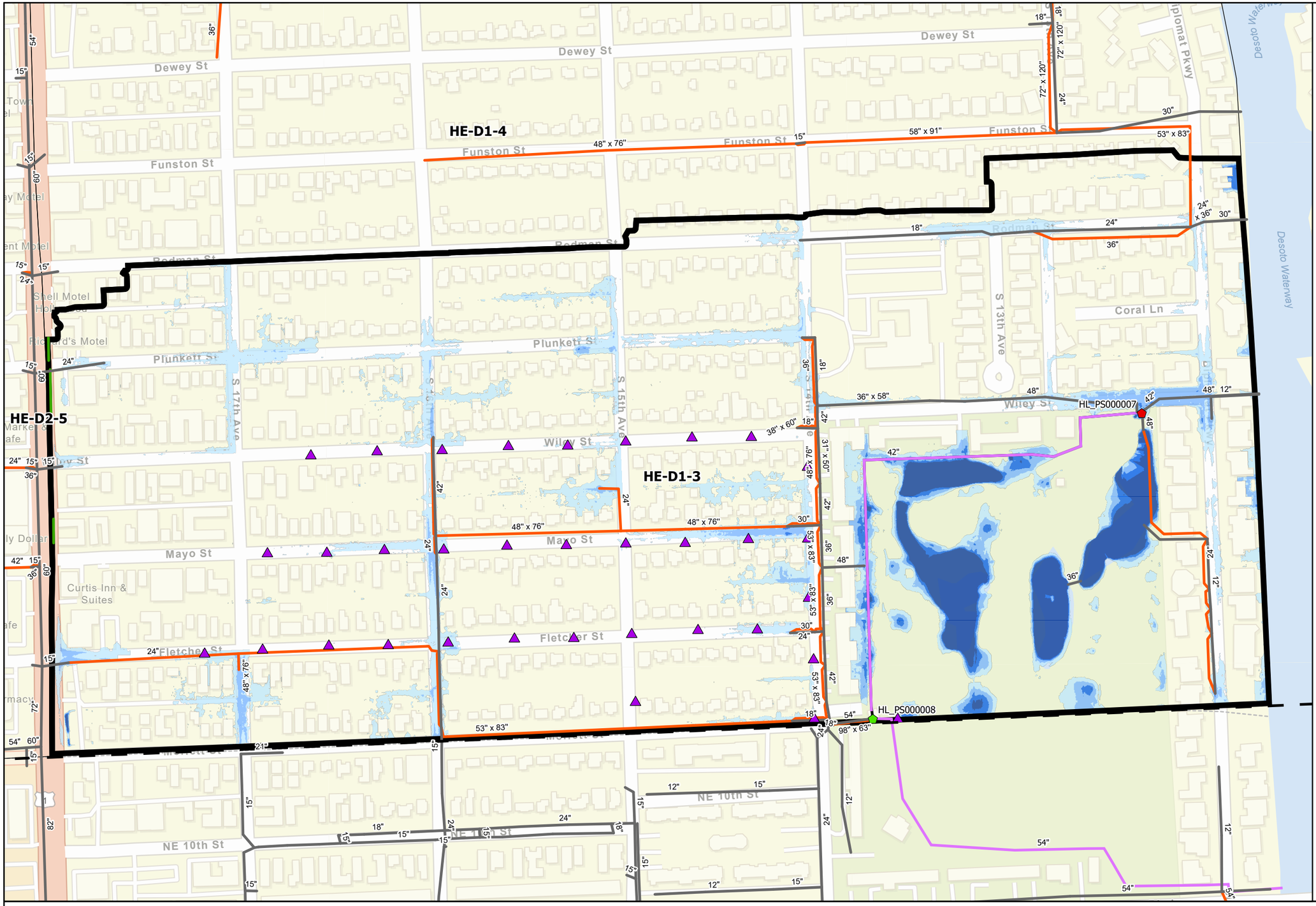

Legend

- 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 Lakes South

0 170 340 680 Feet

1:4,000

City of Hollywood Stormwater Master Plan

HE-D1-3_ALT1-10

2/28/2023

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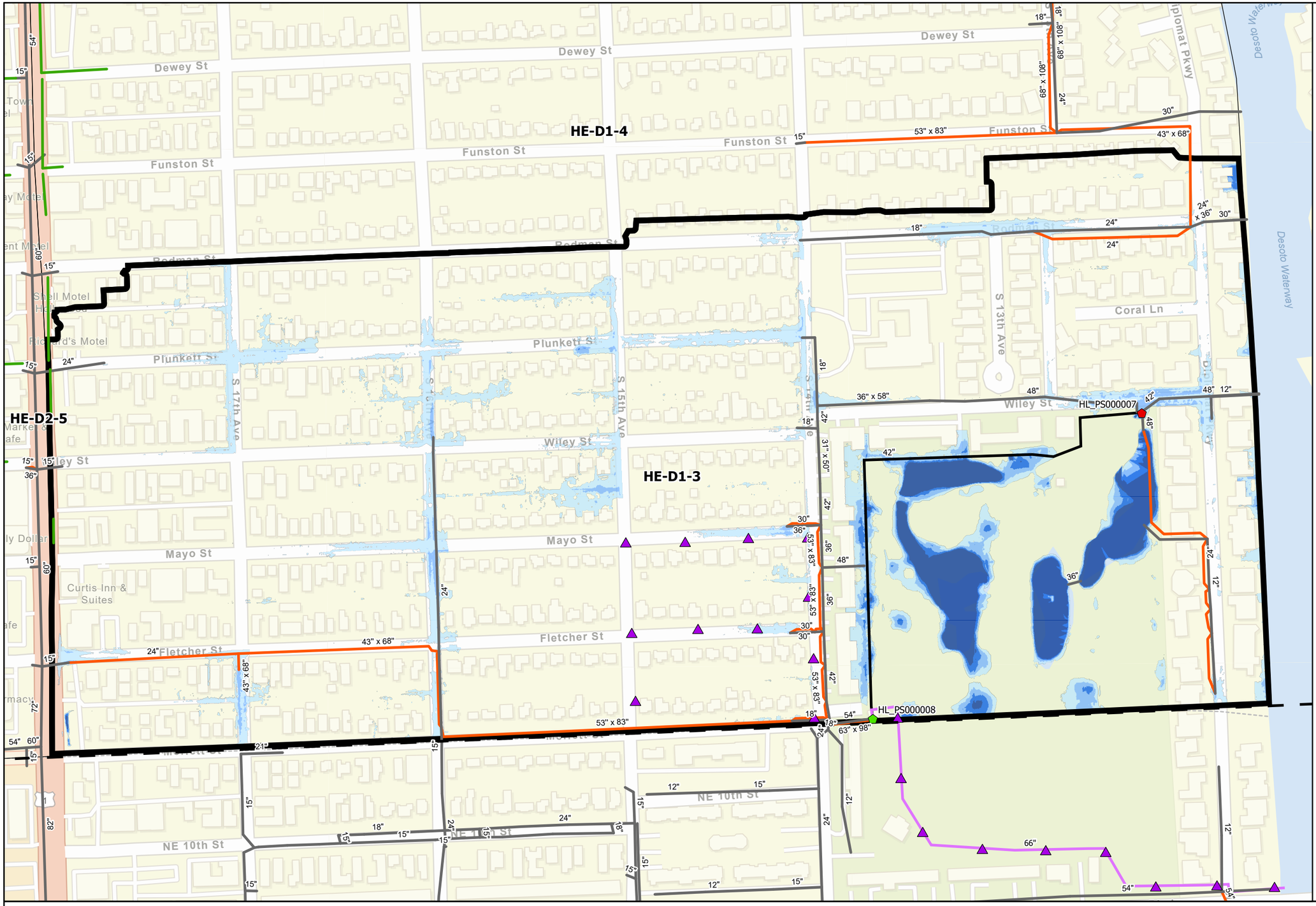

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area Hollywood Lakes South

City of Hollywood Stormwater Master Plan
HE-D1-3_ALT2-5
2/28/2023

0 170 340 680 Feet
1:4,000

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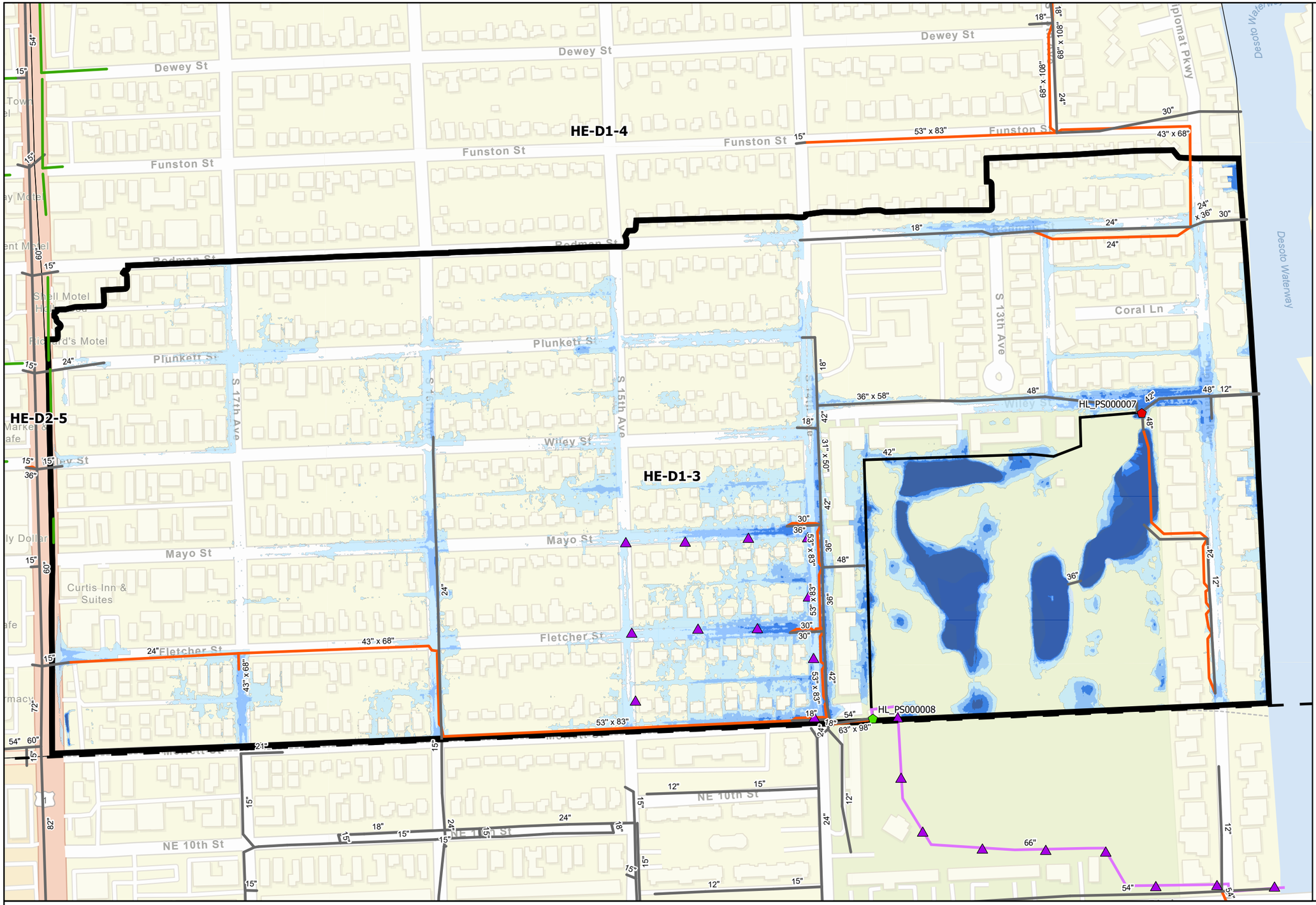

Predicted Flooding Reduction and Proposed ALT 2 CIP for 10-year Design Storm in CIP Area
Hollywood Lakes South

City of Hollywood Stormwater Master Plan
HE-D1-3_ALT2-10
2/28/2023

0 170 340 680 Feet
1:4,000

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		CONCEPTUAL CAPITAL COST ESTIMATE					Hollywood Lakes 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	4,180	$ 4,104,760
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	7,875	$ 2,779,875
0010	11		IWI-Injection Wells-Inline		EA	$ 65,000.00	8	$ 520,000
0011	12		IWO-Injection Wells -Offline		EA	$ 75,000.00	35	$ 2,625,000
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								$ 16,779,635
EXFILTRATION WITH GRAVITY MAINS							Hollywood Lakes 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	80	$ 3,600
0023	23	24		GM-Gravity Main Collector	Circular	LF	$ 48.00	1,752	$ 84,086
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	294	$ 23,520
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	350	$ 40,250
0029	27	48		GM-Gravity Main Collector	Circular	LF	$ 125.00	0	$ -
0030	28	54		GM-Gravity Main Collector	Circular	LF	$ 150.00	21	$ 3,150
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	72	$ 16,873
0039	36	43	68	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 370.00	117	$ 43,401
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	2,176	$ 870,440
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	3,024	$ 1,306,498
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	17	$ 5,344
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	154	$ 63,099
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	4	$ 140,000
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	350	$ 87,500
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	94	$ 2,825,025
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	2	$ 10,000
0092	51			Ret/Det Pond		CUY	$ 355.00	0	$ -
							#N/A	#VALUE!	#VALUE!
							#N/A	#VALUE!	#VALUE!
GRAVITY MAIN SUBTOTAL							#N/A		$ 5,582,786
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	20,466	$ 5,525,820
								CONSTRUCTION COST SUBTOTAL	**$ 27,888,241**
GENERAL CONDITIONS								Hollywood Lakes South	
0061		Mobilization				LS	**4%**	$ 27,888,241	$ 1,115,530
0062		Insurance and General Conditions				LS	**2%**	$ 27,888,241	$ 557,765
0063		Permits/Fees				LS	**2%**	$ 27,888,241	$ 557,765
0064		Maintenance of Traffic				LS	**3%**	$ 27,888,241	$ 836,647
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 27,888,241	$ 4,183,236
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 27,888,241	$ 1,115,530
0067		OCI Management Cost				LS	**15%**	$ 27,888,241	$ 4,183,236
0068		Project Contingency Costs				LS	**30%**	$ 27,888,241	$ 8,366,472
		Land acquisition							
NS SUBTOTAL									$ 20,916,181
TOTAL									**$ 48,804,422**

		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Lakes 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	2,090	$ 2,052,380
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	20	$ 1,300,000
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	0.5	$ 1,200,000
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									$ 8,052,380
EXFILTRATION WITH GRAVITY MAINS								Hollywood Lakes 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	1,360	$ 65,280
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	116	$ 6,032
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	117	$ 9,360
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	60	$ 9,000
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	1,076	$ 398,120
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	0	$ -
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	1,919	$ 829,008
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	284	$ 116,440
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	21	$ 9,660
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	4	$ 140,000
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	350	$ 87,500
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	48	$ 362,788
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								$ 2,103,188
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	7,397	$ 1,997,190
								CONSTRUCTION COST SUBTOTAL	$ 12,152,758
GENERAL CONDITIONS								Hollywood Lakes South	
0061		Mobilization				LS	4%	$ 12,152,758	$ 486,110
0062		Insurance and General Conditions				LS	2%	$ 12,152,758	$ 243,055
0063		Permits/Fees				LS	2%	$ 12,152,758	$ 243,055
0064		Maintenance of Traffic				LS	3%	$ 12,152,758	$ 364,583
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 12,152,758	$ 1,822,914
0066		Construction Engineering Inspection Costs				LS	4%	$ 12,152,758	$ 486,110
0067		OCI Management Cost				LS	15%	$ 12,152,758	$ 1,822,914
0068		Project Contingency Costs				LS	30%	$ 12,152,758	$ 3,645,827
NS SUBTOTAL									$ 9,114,568
TOTAL									$ 21,267,326

- **Figure HE-D1-3-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HE-D1-3-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HE-D1-3_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HE-D1-3_ALT2 – Planning Budget for Alternative 2 Proposed CIP**

3.2.4.4 CIP Area HE-D1-4 (Hollywood Lakes - South Lake)

Root Causes of Flooding

This CIP area is characterized residential land use. There is higher ground to the west near US-1 and low area elsewhere in the basin (road crowns are below 1 NAVD). The area was served by SW 09 which is undersized and out of service. Due to the low elevation, the multiple gravity outfalls do not work at high tide and there is significant tidal inflow into the area.

Alternative 1

Proposed CIP:

- Two new SWPSs for the service area:
  - The existing SW09 stormwater pump station located at S Southlake Dr at the north end of S 12 Ave on the lake has a capacity of approximately only 2 cfs and is to be abandoned. A new replacement SW09 SWPS upgraded to a large Type IV SWPS is required at a convenient location at the lake edge R/O/W in approximately the same vicinity at a total capacity of 400 cfs pumping directly into South Lake.
  - New SSouthLake Type I SWPS at the easternmost point in the street ending ROW of S South Lake Drive at the ICW, at a capacity of 100 cfs pumping directly into the ICW, and 8 new IWs in the area (32 cfs at approximately 4 cfs per well).
- New gravity collection systems and inlets in neighborhoods to the new SWPS.
- New 4,270 l.f. of exfiltration systems in neighborhoods.
- Low roadway raising improvements in service area as collection systems are installed to remove the dips currently resulting in flooding.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded 100 yr storm: pre-11, with seawall-189, post-0

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- Two new SWPSs for the service area:

  - The existing SW09 stormwater pump station located at S Southlake Dr at the north end of S 12 Ave on the lake has a capacity of approximately only 2 cfs and is to be abandoned. A new replacement SW09 SWPS upgraded to a Type III SWPS at a convenient location along the lake edge R/O/W I the near vicinity at total capacity of 325 cfs pumping into South Lake.

  - New SSouthLake SWPS at the eastern street ending R/O/W of S South Lake Drive at the ICW, Type I at a capacity of 105 cfs pumping directly into the ICW, and 9 IWs in the area (36 cfs at 4 cfs per well).

- New gravity collection systems and inlets in neighborhoods to the new SWPS.
- New 4,235 l.f. of exfiltration systems in neighborhoods.
- Low roadway raising improvements as the collection system is installed in the service area to remove dips resulting in flooding.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded 100 yr storm: pre-11, with seawall-189, post-0

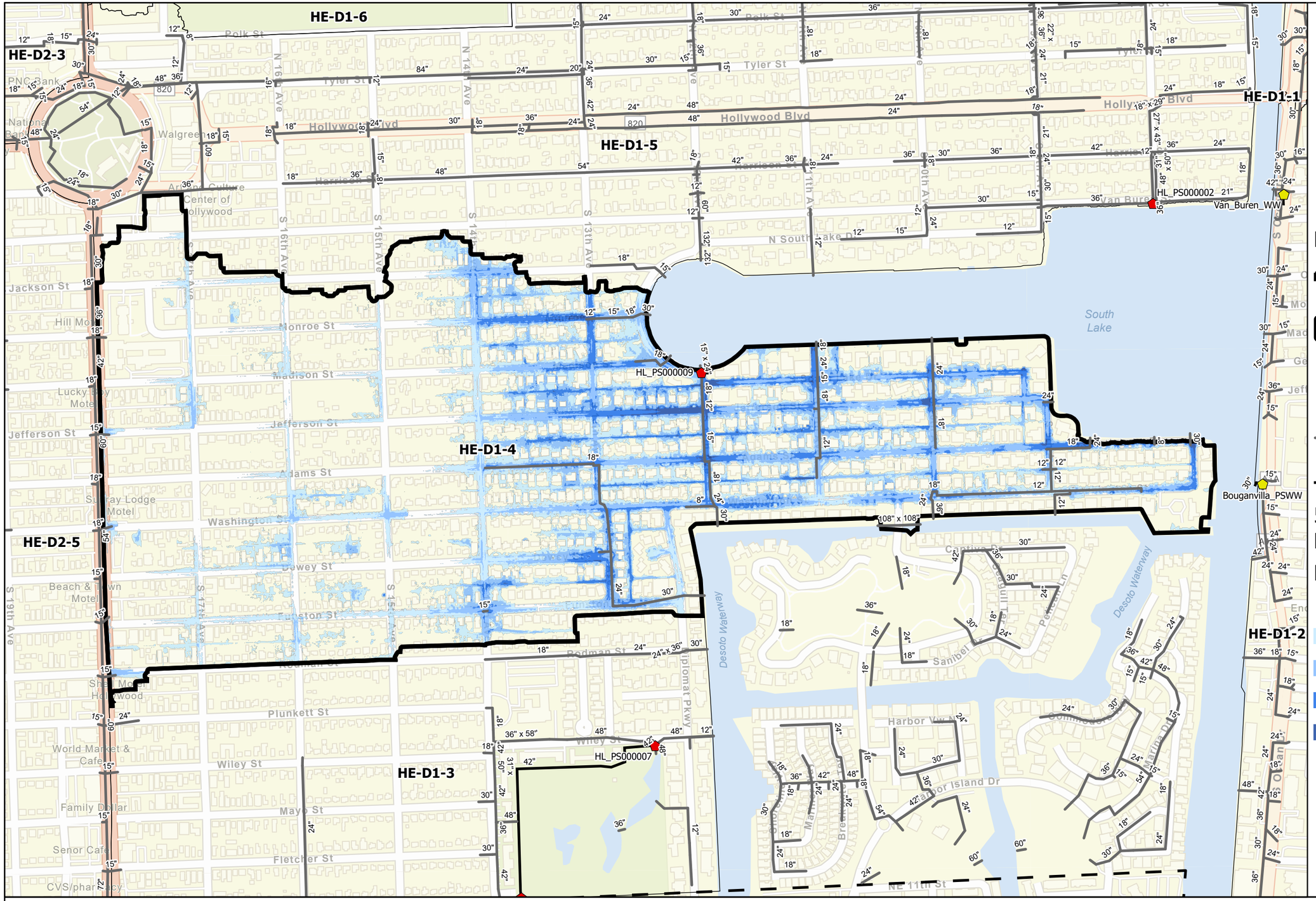
Summary of Offsite Issues Affecting CIP Area:

1. None.

HE-D1-4 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 HE-D1-4-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HE-D1-4-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HE-D1-4-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HE-D1-4-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HE-D1-4-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HE-D1-4-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HE-D1-4_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HE-D1-4_ALT2 – Planning Budget for Alternative 2 Proposed CIP**



Current Conditions Flooding in CIP Area
Hollywood Lakes - South Lake
5-year Design Storm

City of Hollywood Stormwater Master Plan
HE-D1-4_EC-5
2/28/2023

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

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HE-D1-6
HE-D2-3
HE-D1-5
HE-D1-1
HE-D1-4
HE-D2-5
HE-D1-2
HE-D1-3
HL_PS000002
Van_Buren_WW
HL_PS000009
Bouganvilla_PSWW
HL_PS000007
South Lake
Desoto Waterway
Polk St
Tyler St
Hollywood Blvd
Harrison St
N South Lake Dr
Jackson St
Monroe St
Madison St
Jefferson St
Adams St
Washington St
Lewey St
Johnston St
Redman St
Plunkett St
Wiley St
Mayo St
Fletcher St
NE 11th St
Sanibel Dr
Harbor Island Dr
Diplomat Pkwy
N 16th Ave
N 14th Ave
S 16th Ave
S 15th Ave
S 14th Ave
S 13th Ave
S 19th Ave
S 17th Ave
S 11th Ave
S 10th Ave
PNC Bank
Walgreens
Arts & Culture Center of Hollywood
Lucky Day Motel
Sunray Lodge Motel
Beach & Town Motel
Shell Mart Hollywood
World Market & Cafe
Family Dollar
Senor Cafe
CVS/pharmacy

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 Lakes - South Lake
10-year Design Storm

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan
HE-D1-4_EC-10
2/28/2023

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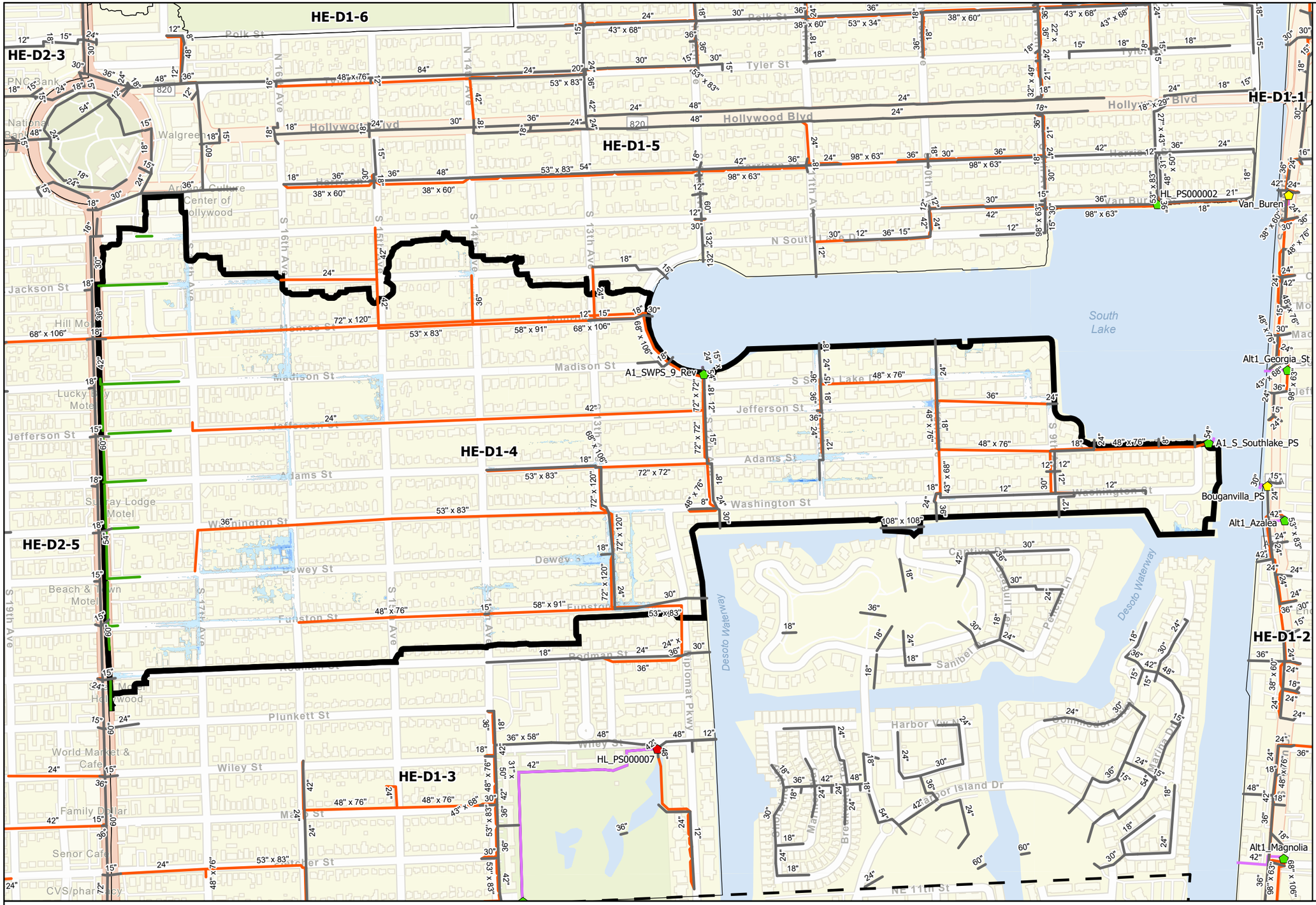


Legend

- 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.

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

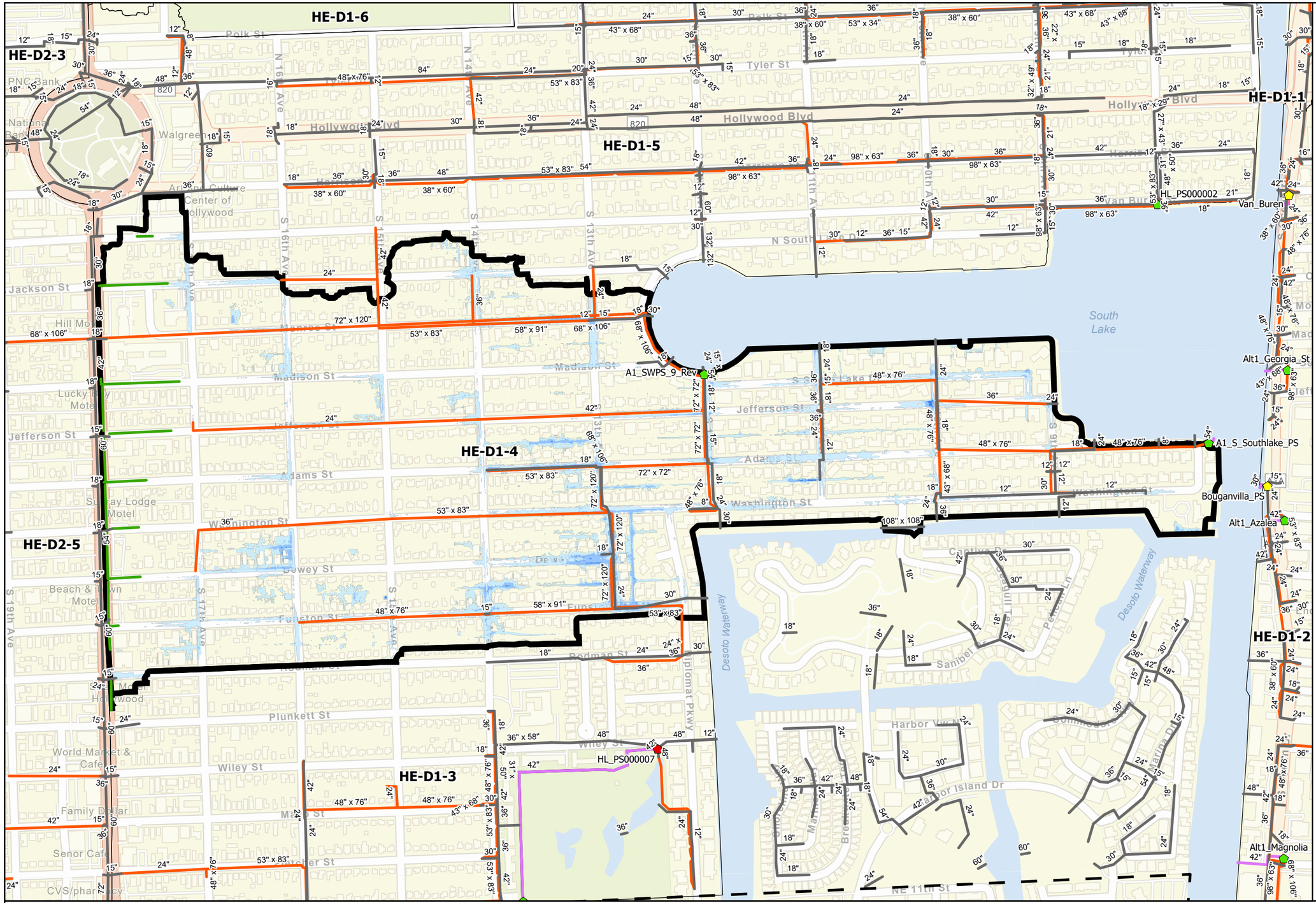
0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HE-D1-4_ALT1-5

2/28/2023



CDM Smith

CITY OF Hollywood FLORIDA

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HE-D1-4_ALT1-10

2/28/2023

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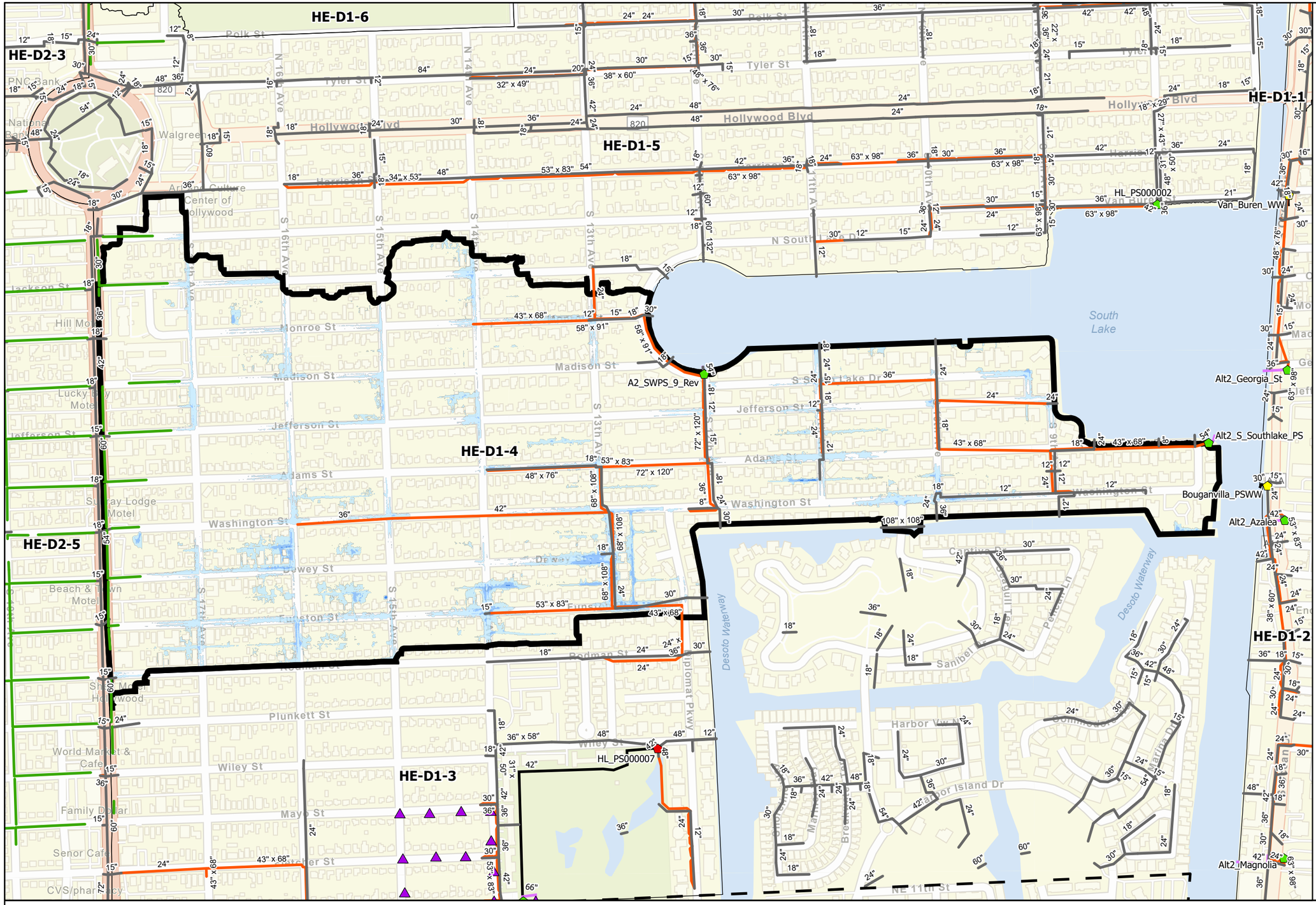

Predicted Flooding Reduction and Proposed ALT 2 CIP for 5-year Design Storm in CIP Area
Hollywood Lakes - South Lake

City of Hollywood Stormwater Master Plan
HE-D1-4_ALT2-5
2/28/2023

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

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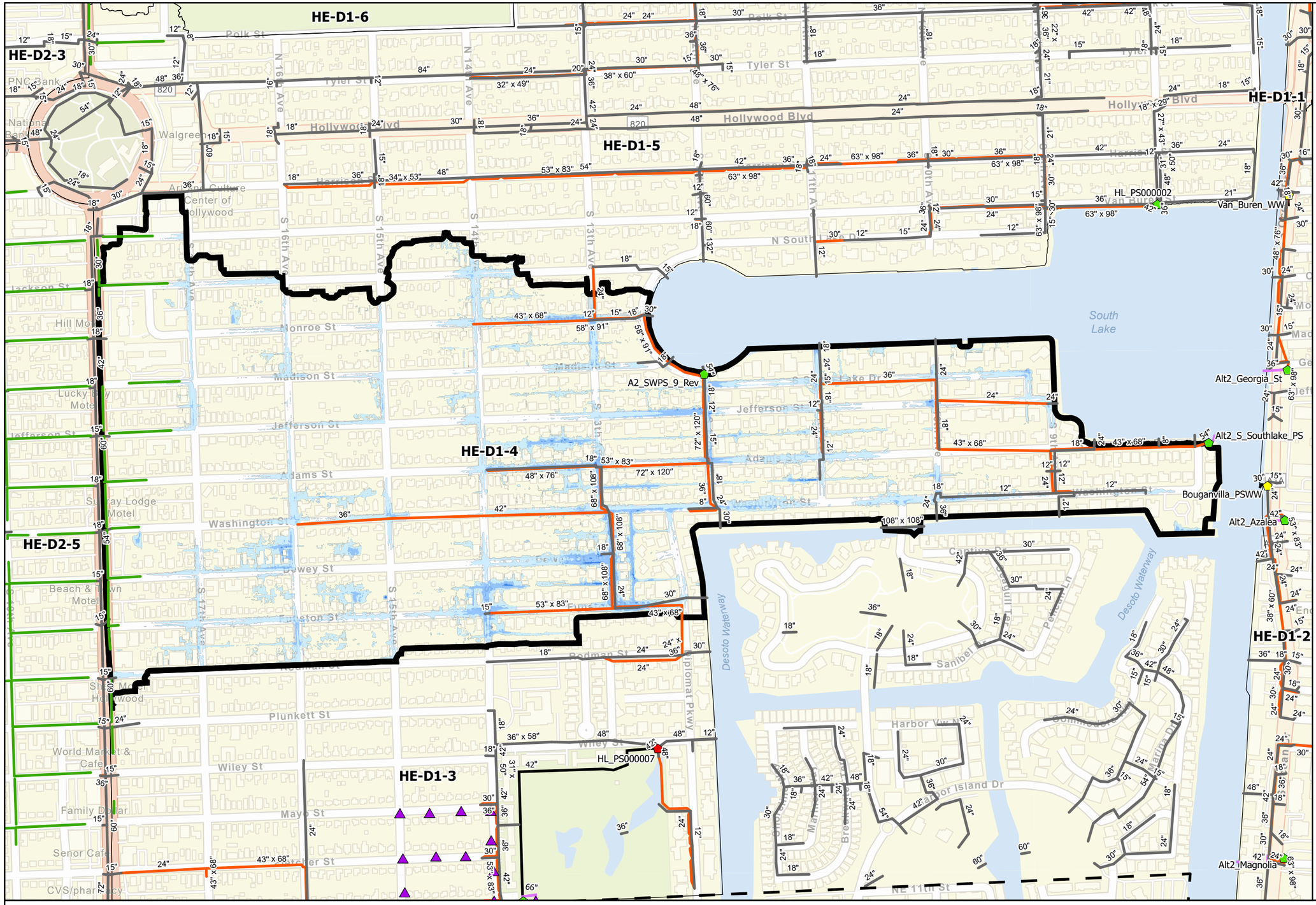

Legend

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

10-Year ALT 2 Storm Flood Feet

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

CDM Smith

CITY OF Hollywood FLORIDA

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HE-D1-4_ALT2-10

2/28/2023

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		CONCEPTUAL CAPITAL COST ESTIMATE					Hollywood Lakes Southlake	
							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	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	1	$ 6,750,000
0016	54	PS-CS22 Storm Drainage Pump Stations 600CFS			EA	$ 8,000,000.00	0	$ -
AIN SUBTOTAL								$ 9,150,000
EXFILTRATION WITH GRAVITY MAINS							Hollywood Lakes Southlake	
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	3,668	$ 176,064
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	475	$ 24,700
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	3,211	$ 256,888
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	2,275	$ 261,648
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	391	$ 144,596
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	5,002	$ 2,000,600
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	4,368	$ 1,886,933
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	1,704	$ 545,344
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	1,080	$ 496,616
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	3,663	$ 2,087,682
0072	45	72	72	GM-Gravity Main Collector	Rectangle Closed	LF	$ 570.00	2,701	$ 1,539,456
0049	46	84	120	GM-Gravity Main Collector	Rectangle Closed	LF	$ 750.00	36	$ 26,850
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	4,269	$ 1,067,250
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	274	$ 8,210,375
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		$ 18,725,002
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	32,842	$ 8,867,340
								CONSTRUCTION COST SUBTOTAL	**$ 36,742,342**
GENERAL CONDITIONS								Hollywood Lakes Southlake	
0061		Mobilization				LS	**4%**	$ 36,742,342	$ 1,469,694
0062		Insurance and General Conditions				LS	**2%**	$ 36,742,342	$ 734,847
0063		Permits/Fees				LS	**2%**	$ 36,742,342	$ 734,847
0064		Maintenance of Traffic				LS	**3%**	$ 36,742,342	$ 1,102,270
0065		Engineering Design & CA Oversight Costs				LS	**15%**	$ 36,742,342	$ 5,511,351
0066		Construction Engineering Inspection Costs				LS	**4%**	$ 36,742,342	$ 1,469,694
0067		OCI Management Cost				LS	**15%**	$ 36,742,342	$ 5,511,351
0068		Project Contingency Costs				LS	**30%**	$ 36,742,342	$ 11,022,703
		Land acquisition							
NS SUBTOTAL									$ 27,556,756
TOTAL									**$ 64,299,098**

		CONCEPTUAL CAPITAL COST ESTIMATE						Hollywood Lakes Southlake	
								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	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									$ 5,900,000
EXFILTRATION WITH GRAVITY MAINS								Hollywood Lakes Southlake	
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	2,947	$ 141,456
0024	24	30		GM-Gravity Main Collector	Circular	LF	$ 52.00	0	$ -
0026	25	36		GM-Gravity Main Collector	Circular	LF	$ 80.00	2,155	$ 172,400
0028	26	42		GM-Gravity Main Collector	Circular	LF	$ 115.00	1,497	$ 172,155
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	3,828	$ 1,416,360
0040	37	48	76	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 400.00	754	$ 301,600
0041	38	53	83	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 432.00	914	$ 394,848
0042	39	58	91	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 320.00	1,036	$ 331,520
0043	40	63	98	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 410.00	0	$ -
0044	41	68	106	GM-Gravity Main Collector	Horizontal Ellipse	LF	$ 460.00	1,038	$ 477,480
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	1,351	$ 770,070
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	42	$ 31,500
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	4,236	$ 1,059,000
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	165	$ 1,237,375
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								$ 6,505,764
0060		Pavement Restoration including Pavement Marking (Full Road)				LF	$ 270.00	19,798	$ 5,345,460
							CONSTRUCTION COST SUBTOTAL		$ 17,751,224
GENERAL CONDITIONS								Hollywood Lakes Southlake	
0061		Mobilization				LS	4%	$ 17,751,224	$ 710,049
0062		Insurance and General Conditions				LS	2%	$ 17,751,224	$ 355,024
0063		Permits/Fees				LS	2%	$ 17,751,224	$ 355,024
0064		Maintenance of Traffic				LS	3%	$ 17,751,224	$ 532,537
0065		Engineering Design & CA Oversight Costs				LS	15%	$ 17,751,224	$ 2,662,684
0066		Construction Engineering Inspection Costs				LS	4%	$ 17,751,224	$ 710,049
0067		OCI Management Cost				LS	15%	$ 17,751,224	$ 2,662,684
0068		Project Contingency Costs				LS	30%	$ 17,751,224	$ 5,325,367
NS SUBTOTAL									$ 13,313,418
TOTAL									$ 31,064,642

3.2.4.5 CIP Area HE-D1-5 (Hollywood Lakes - Central)

Root Causes of Flooding

This CIP area is characterized residential land use. There is higher ground to the west and low area elsewhere in the basin (road crowns are below 1 NAVD). The area is served by two undersized SWPS SW 01 and SW 02 which are undersized for the desired LOS and deep flooding occurs. Due to the low elevation, the gravity multiple outfalls do not work at high tide and there is significant tidal inflow into the area.

Alternative 1

Proposed CIP:

- Three new (or upgraded existing) SWPSs for the service area:

    1. Existing SW01 pump station capacity is approximately 58 cfs and is to be upgraded with an additional 350 cfs to a Type IV 408 cfs SWPS discharging directly into North Lake near the ICW at the existing site at N 8th Ave and S North Lake drive.

    2. Existing SW02 pump station capacity is approximately 89 cfs and is to be upgraded with an additional 220 cfs to a Type III 309 cfs SWPS discharging directly into South Lake near the ICW at S 8th Ave and N South Lake Drive.

    3. New SNorthLake SWPS at the ROW on the circle, Type III 250 cfs capacity pumping directly into North Lake at S North Lake Dr and N 12th Ave.

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

- New 510 l.f. of exfiltration systems in neighborhoods.

- Low roadway raising improvements in service area to remove dips resulting in flooding as collection systems are installed in the roadways.

Summary of Locations Not Meeting ALT 1 LOS:

1. Structures Flooded pre-88, seawall-587, post-1

Summary of Offsite Issues Affecting CIP Area:

1. None.

Alternative 2

Proposed CIP:

- Three new (or upgraded existing) SWPSs for the service area:

    1. Existing SW01 pump station capacity is approximately 58 cfs and is to be upgraded with an additional 125 cfs to a Type II 183 cfs SWPS discharging directly into North Lake near the ICW at the existing site at N 8th Ave and S North Lake drive.

    2. Existing SW02 pump station capacity is approximately 89 cfs and is to be upgraded with an additional 140 cfs to a Type III 229 cfs SWPS discharging directly into South Lake near the ICW at S 8th Ave and N South Lake Drive.

3. New SNorthLake SWPS at the ROW on the circle, Type I 80 cfs capacity pumping directly into North Lake at S North Lake Dr and N 12th Ave.

- New gravity collection systems and inlets in neighborhoods to the new SWPSs.
- New 805 l.f. of exfiltration systems in neighborhoods.
- Low roadway raising improvements in service area to remove dips resulting in flooding as collection systems are installed under roadways.

Summary of Locations Not Meeting ALT 2 LOS:

1. Structures Flooded pre-88, seawall-587, post-66
2. The addition of the required seawalls in this CIP area results in many additional houses flooding in the 100-yr storm. The pump station can be made larger if desired to lower stages further and reduce the number of homes flooded.

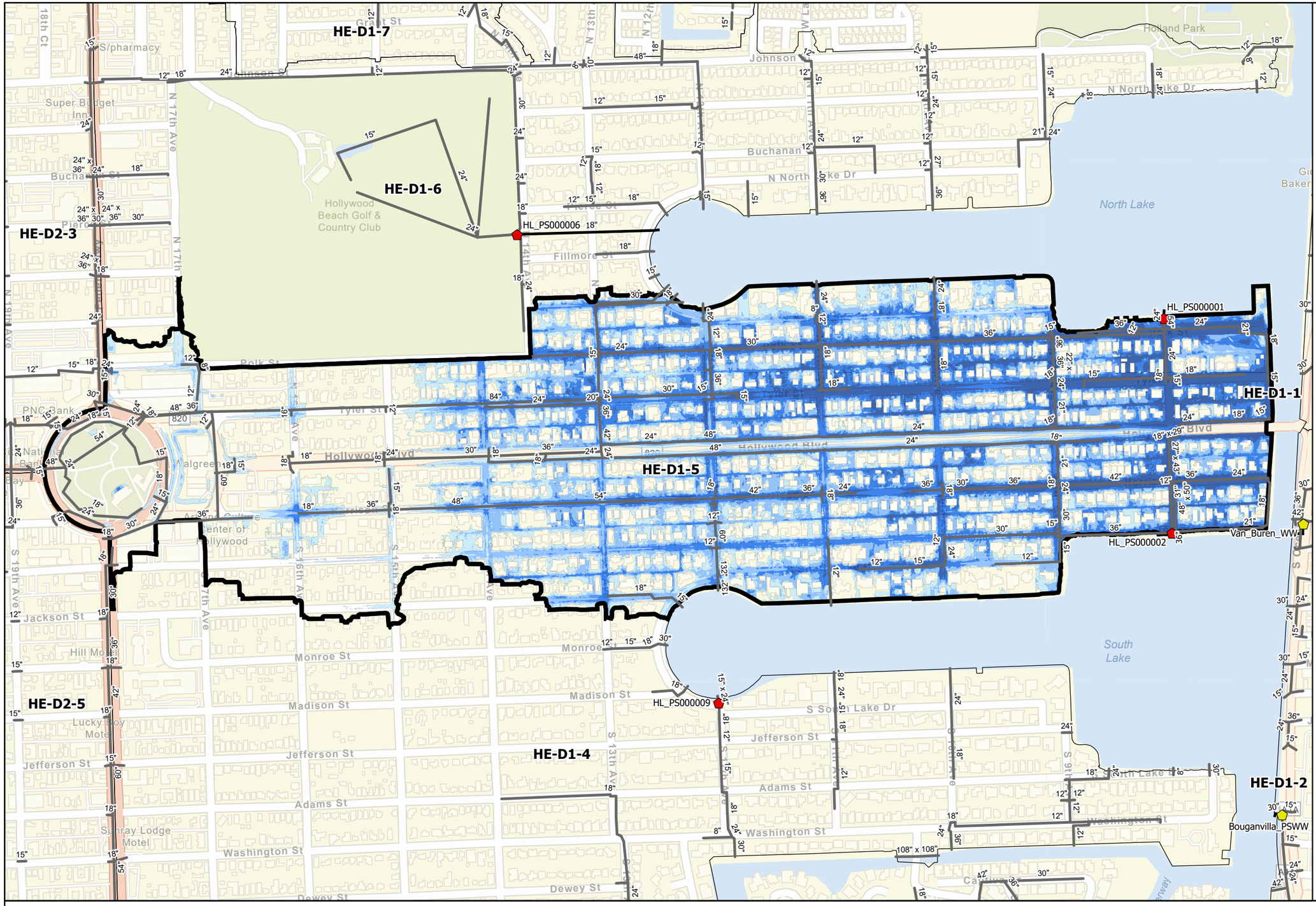
Summary of Offsite Issues Affecting CIP Area:

1. None.

HE-D1-5 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 HE-D1-5-EC_5 - Current Conditions Flooding in CIP Area 5-year Design Storm**
- **Figure HE-D1-5-EC_10 - Current Conditions Flooding in CIP Area 10-year Design Storm**
- **Figure HE-D1-5-CIP_ALT1_5 - Predicted Flooding Reduction and Proposed ALT1 CIP for 5-year Design Storm**
- **Figure HE-D1-5-CIP_ALT1_10 - Predicted Flooding Reduction and Proposed ALT1 CIP for 10-year Design Storm**
- **Figure HE-D1-5-CIP_ALT2_5 - Predicted Flooding Reduction and Proposed ALT2 CIP for 5-year Design Storm**
- **Figure HE-D1-5-CIP_ALT2_10 - Predicted Flooding Reduction and Proposed ALT2 CIP for 10-year Design Storm**
- **Table HE-D1-5_ALT1 – Planning Budget for Alternative 1 Proposed CIP**
- **Table HE-D1-5_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.

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

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HE-D1-5_EC-5

2/28/2023

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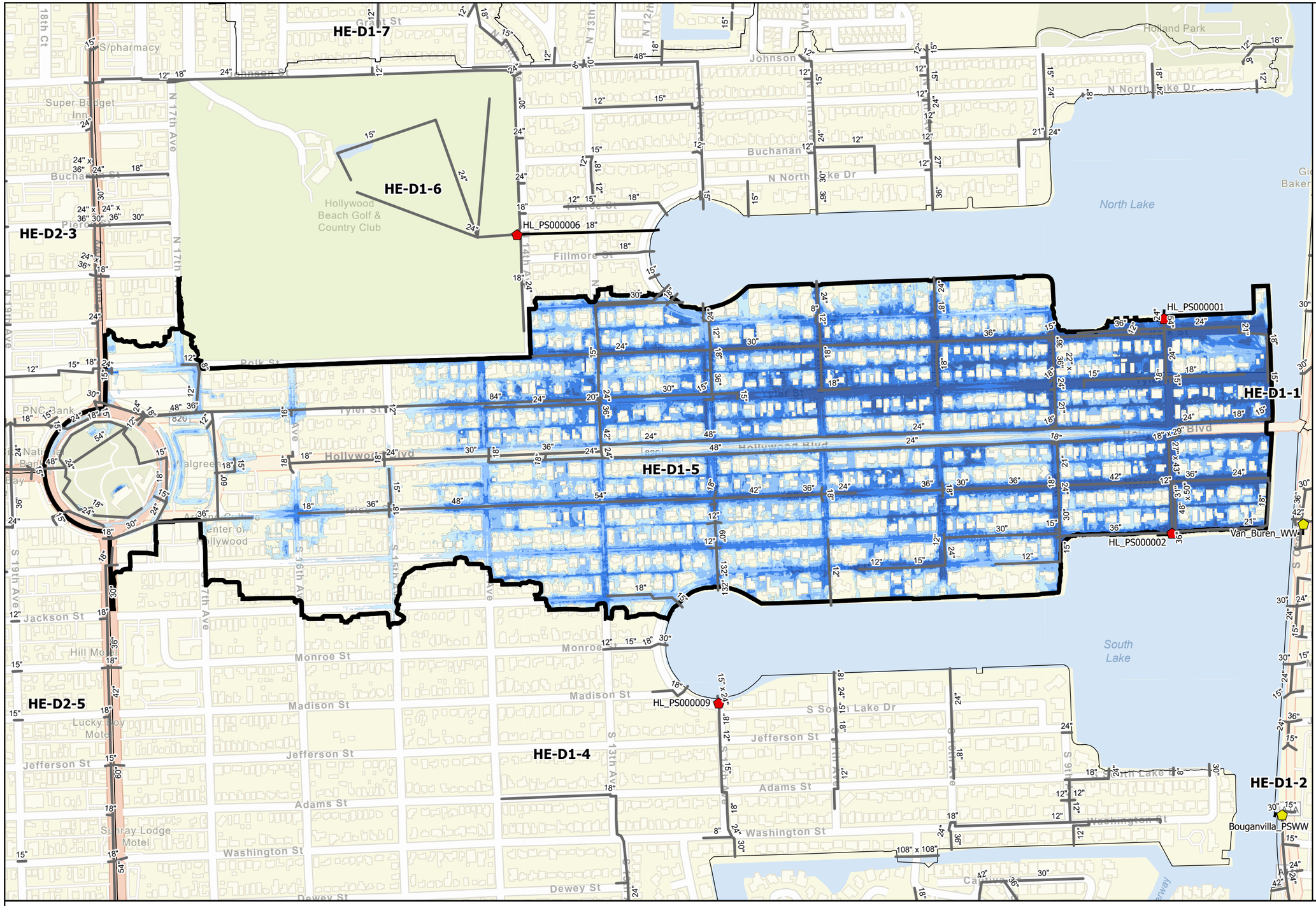

Legend

- 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.

Current Conditions Flooding in CIP Area
Hollywood Lakes - Central
10-year Design Storm

0 337.5 675 1,350 Feet

1:8,000

City of Hollywood Stormwater Master Plan

HE-D1-5_EC-10

2/28/2023

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